

## **TAU PROJECT REPORT**

**Project title:** Exploring engineering and media roles in the monitoring and humanization of climate change

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### **AIMS:**

The past two years have transformed traditional teaching and learning methods and have forced academic institutions to blend both online and contact classes. Although this change has been smooth for some who are familiar with the usage of technology, it has been a daunting and exhausting task for others and even raising anxiety levels to both students and faculty. Such transformation compels us academics to be innovative in how we teach and provide a unique learning environment and experience for our students. This move also necessitates that we regulate our curriculum and methods of teaching and learning.

The University of Johannesburg (UJ) aims to be an international university of choice, anchored in Africa, yet dynamically shaping the future. According to the [Teaching and Learning Policy](#), one of the principles which informs practices in the domain of learning and teaching is that “appropriate physical and virtual learning environments will support teaching innovation and social learning, both within and outside of classrooms, into the future. UJ will capitalize on the potential of new technologies to support collaborative and authentic learning, and the social integration of the academic community”. The aim of the proposed TAU project was to bridge the gap among students, between students and staff, and between the institution and the communities it is situated in.

The project was guided by the following strategic objectives of the University of Johannesburg:

- Excellence in Research and Innovation
- Excellence in Teaching and Learning
- An International Profile for Global Excellence and Stature (GES)

- An Enriching Student-Friendly Learning and Living Experience
- National and Global Reputation Management
- Fitness for Global Excellence and Stature (GES)

## **BACKGROUND TO PROJECT:**

I was relieved when the TAU committee informed me that I could still be part of TAU even though I had moved to the University of Johannesburg from the Durban University of Technology (DUT). Fortunately for me, the School of Communication (SoC) and the Communication and Media Department (CAM) did not have a student-led website that would be a platform for students to simulate a newsroom environment and gain practical skills which would make them even more employable. One of the outcomes of the TAU project would be to provide a solution thereby providing industry experience to all SoC and CAM students whilst they are on campus. In a country where the unemployment rate is at its highest, it is imperative that our Scholarship of Teaching and Learning balances knowledge of both theory and practical work. Aligned with the meaning of social justice which is said to create teaching and learning environments that support all students and staff equitably, one of the outcomes of the project is to exhibit the inclusion of both staff and students from all race groups, gender, religion, and class. Content uploaded on the platform will aim to show an equal representation of the different voices not only in the UJ community, but also in our country. A few weeks after my arrival at UJ, I pitched my TAU project at the CAM Department meeting and later at the SoC meeting. After that, I met with the directors of ICS and academic development, and both individuals also loved the TAU project idea. Two colleagues from CAM later asked to join the project and all three of us worked on the editorial policy of the website, came up with a name and solicited assistance from the design school to help create the logo. We are currently waiting for funding to help pay for the creation of the website, which is the overall TAU project. In the meantime, I engaged with digital materials with the students in a learning environment that embraced internationalization and collaboration – two outcomes that the student-led website (the overall TAU project) would endeavour to include.

We live in a digital world that enables our students to be both global citizens and subsist in a local context. Such transformation compels us academics to be innovative in how we teach and

provide a unique learning environment and experience for our students. This TAU project aimed to integrate digital media technologies in teaching and learning by fostering practical application of knowledge and producing future-ready graduates who contribute to the improvement of not only their own lives, but the livelihoods of those around them.

This project emanated from an idea to provide an international experience for my students. After several conversations with a colleague from the University of West Indies (UWI) in Jamaica, we agreed to collaborate using the Applied Journalism students from UJ and Civil Engineering students at the UWI. We both acknowledged that digitisation presented academics in higher education institutions with new and innovative ways of delivering curricula that is not abstract, but practical by looking at global issues in the local context. The TAU pilot project aimed to provide a practical platform for the internationalization and decolonization of the curriculum from UJ and UWI. Majority of students in the Applied Journalism module came into the honours class from various other institutions. Upon our first interaction, I was informed by the students that they had not previously engaged in an international project, nor did they learn practical production skills in during their undergraduate level. Immediately, I knew that I had to be innovative and provide a memorable learning experience for my students.

The project was underpinned by the transformative learning theory which states that the principle of personal experience is an integral part of the learning process. The virtual project theme was Climate Change and sub-themes were explored looking at flooding effects, structural issues following natural disasters, drought, and food security. The project was embedded in existing modules from both academic institutions and students were assessed on their Zoom meetings, Padlet participation, WhatsApp discussions, and the collaborative component of their final productions. Deliverables included posters on Padlet and video productions. Results showed that the inclusion of innovation in the Scholarship of Teaching and Learning leads to a socially just curriculum where students identified a global issue and provided local solutions. Students between the two continents centered indigenous voices by telling humanizing climate change and telling local stories of how climate change affects local communities (previously known as disadvantaged communities). Students' reflective essays portrayed changed behaviour and their determination to be climate change agents in their communities.

## **SOCIAL JUSTICE**

As the facilitator of the project, I was determined to give our students an international experience regardless of their financial background. Coming up with the idea of the overall project was a negotiation process between my colleague and me. We knew we did not want to engage in themes that could potentially stereotype students (or their countries of origin) on race, culture, gender, religion, and class. We wanted to work on something that would excite students and not be a trigger for any of them. We acknowledged the complexities and crossroads of working on a project geared towards transformational change. Moreover, we ventured towards taking our students on a transformative experience where they could individually and collectively endeavor towards critical consciousness.

My UWI counterpart and I discussed inequalities and stereotypes around race, gender, and class and how we could look at these from a media and engineering perspective. Finally, we agreed on an umbrella theme of climate change. We felt that this idea was not discriminatory and that students could be liberated and equally engage with the idea. When we pitched the idea to students, we discussed dominant discourses around climate change and how climate change is a global issue. We were also transparent with them in terms of our fears on embarking on such a project for the first time and that we were not there as lecturers but facilitators to guide them throughout the process. It was also explained to students that their task was to look at this global phenomenon from a local perspective that included both South Africa and Jamaica and what role the media and engineers played in the matter.

The project provided an opportunity for students to learn in an environment that acknowledged and appreciated their voices (Hiemstra, 1994). They were given support of resources needed to aid the learning process. Zoom meetings were conducted at the staff room where Wi-Fi is available even during peak times of loadshedding. Students shared production equipment among each other, and they accompanied one another during production shoots. My colleague and I established our positions as facilitators and not lecturers because we wanted to encourage students to take ownership of the project, engage with it and explore various ways to tackle issues around climate change. This facilitated independent and peer learning opportunities among (Hiemstra, 1994; Wenger, 1998; Siemens, 2005; Kalamas Hedden et al., 2017) as they were soon able to encourage one another by taking a global issue and making it relate to their

own lives and the lives of those around them. Short documentaries and news packages that were submitted for assessment revolved around real life stories of people who not only identified challenges in their lives but were open to possible solutions. The project idea of climate change was not abstract, but we humanized the curriculum in such a way that students realized their individual roles in the conversations around climate change and the responsibilities they each must take care of the planet.

During our online zoom meetings, all students were given an equal opportunity to speak. We acknowledged that through social justice, we had to promote equity of rights, opportunities, access, participation, voice, and recognition of all participants throughout the duration of the collaborative project. Students would at times be separated into breakaway rooms as working groups. We ensured that each working group included representation from both UJ and UWI where they could have their own discussions around the theme. Each group decided on their own sub-theme or an angle to break the climate change theme into small and tangible components.

Throughout the project, we entrusted students to work as independent groups however my colleague and I availed ourselves for consultations if they had any comments or questions. Part of the assessment of the final production project included reflective essays from students on how they found the collaborative project. These were particularly important for us as facilitators as we wanted to learn whether the project was a success or not. It was interesting to see in the students' production work on how the media students focused mostly on effects of climate change to South African and Jamaican societies and how the students from Jamaica provided engineering solutions to those problems. It was important for us as facilitators to ensure that students had access to the resources they needed, and that diversity of views were evident during their Zoom meetings. The project provided a holistic and experiential pedagogy to students.

## **CHALLENGES AND SOLUTIONS**

We were unfortunate that this collaborative interdisciplinary project started at the peak of loadshedding when we were relying heavily on virtual meetings at the beginning. To mitigate this challenge, students were allowed to join Zoom meetings from their locations of choice. The staffroom was also made available to those who also experienced loadshedding in their homes.

The project included groups from different continents, and we had to negotiate with students regarding their availability. Time zone differences were not a problem, but the duration of the project posed a challenge – we only had ten academic weeks to start and complete the project. My colleague and I admitted that we were ambitious but thankfully students embraced the project in such a way that they were willing to work outside their timetable schedule.

Internationalization of the curriculum is important, and more modules need to embed collaborative projects of various nature. Results showed that the inclusion of innovation in the Scholarship of Teaching and Learning leads to a socially just curriculum where students identified a global issue and localized solutions within a decolonial framework.

## **INSTITUTIONAL COIL-IMPLEMENTATION**

Since the collaborative TAU pilot project, I have since had several meetings with colleagues from UJ to discuss how the institution can be part of the SUNY-COIL organisation which is a hub linking academics across the globe to work on inter and multi-disciplinary projects. We are now in the process of getting UJ as one of the official COIL partner institutions where colleagues from various faculties and disciplines will be partnered with other colleagues across the world on collaborative projects. So, what started as a pilot project for TAU will now potentially grow into an institution-wide project that links some of the strategic goals of the university, i.e., internationalization of the curriculum and university, and global citizenship of students.

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