

## HANDS-ON ARTICLES

# HIGHER EDUCATION COMMUNITY ENGAGEMENT PROJECTS AT LOCAL MUSEUMS

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### ***Abstract***

*The University of Pretoria, South Africa, presents a compulsory undergraduate module, Community-based Project (code: JCP) in the Faculty of Engineering, Built Environment and Information Technology. It entails students working for at least 40 hours in the community, and then reflecting on their experiences through various assignments, including a presentation, a report and a YouTube video. A large number of students are enrolled in the module each year. Projects vary from basic renovation and building projects to the teaching of Mathematics and Science, repairing old computers for schools and non-profit organisations, and teaching community members basic computer skills. A number of projects are also taking place at local museums and other historical sites. This service-learning-related course aims to make students more aware of their social responsibility and to teach them soft skills, for example, communication, leadership and time management skills.*

**Keywords:** University of Pretoria; Service learning; Community-based Project Module; JCP module; Museums.

### **Background**

Students in higher education have to take responsibility for their social responsibility in the demanding context of South Africa's socio-economic environment. It is, therefore, essential to include social responsibility skills in the curriculum of students to empower them to understand the social context of the country (Bielefeldt and Canney, 2014). To address this, the curriculum of the University of Pretoria's Faculty of Engineering, Built Environment and Information Technology includes a compulsory undergraduate module: Community-based Project (Code: JCP). This free-standing module gives every student in the Faculty an opportunity to be of service in the community and learn essential life skills (Jordaan, 2012). A large number of students, mainly second-year students, enrol in the module (1 598 students were enrolled in 2019). One lecturer and one

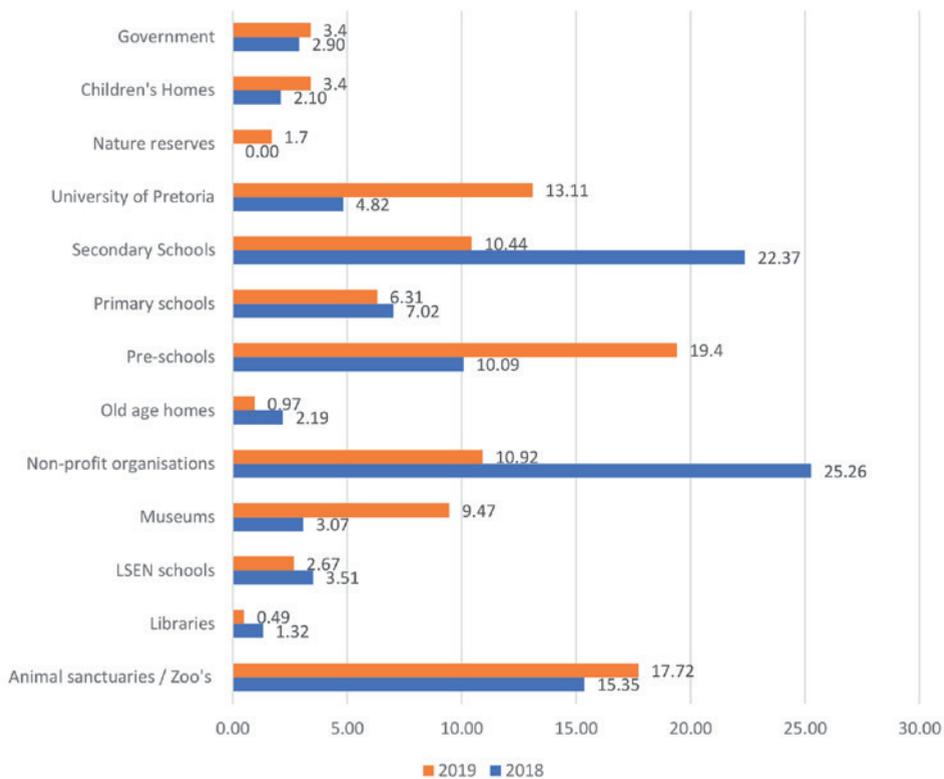
administrative assistant are allocated to the module (Jordaan, 2014) Most of the students are enrolled in the School of Engineering (in 2019, 60.03% of the students were from this school).

The module entails students working for at least 40 hours in the community, and then reflecting on their experiences through a presentation, a report and a YouTube video. Students identify a project that will address the needs of the community. They may identify their own community partner or choose from the community projects that have been identified by the Office of the Community-based Project Module. Students may choose to work in teams of two to five members and have the option to choose a project within prescribed criteria. Some of the criteria include that the project may not be linked to a religious or political party, and they may not earn money while doing the project. Through the execution of the project, students must develop an awareness of their personal, social and cultural values. The students must develop an attitude that shows that they are willing to serve and that they have an understanding of the social issues in South Africa. They need to develop important multidisciplinary and life skills that include communication, interpersonal and leadership skills (Jordaan, 2014).

The module has more than 350 sustainable community partners. These partners include pre-primary schools, primary schools, secondary schools and non-profit organisations, such as museums (Graph 1). Students prefer to do basic renovation and building projects, teach Mathematics and Science, repair old computers or teach basic computer skills to school learners or community members (Jordaan, 2013). Students do projects in various local museums (2018: 3.07%; 2019: 9.47%), such as the Ditsong Pioneer Museum, the Post Office Museum, the Swartkop Air Force Museum, Smuts House Museum and the Irene Concentration Camp Cemetery.

Each community partner gives permission for the students to take photographs and also approves the final YouTube video. The students also give written permission that their photographs and information on their projects may be used for publication. The module has received various campus, national and international awards, and is used as a case study in an international massive open online course (MOOC) on university social responsibility.

**Graph 1: Community partners of the JCP module**



Source: M Jordaan, Data adapted from final outcomes of the 2019 JCP-numbers, 2019.

Upon completion of the module, students reflected positively that they had acquired various skills, including teamwork, communication and project management skills, and they thought that the module had an impact on their awareness of their social responsibility (Jordaan and Mennega, 2019).

The following are examples of different history-related projects.

### **Irene Concentration Camp Cemetery**

For the past three years, students assisted with various tasks at the Irene Concentration Camp Cemetery. The projects vary from basic renovation projects to the identification and tagging of trees, and adding information boards.

The projects are monitored and supervised by the Centurion History Society. The cemetery serves as a remembrance of the tragic events that took place at the concentration camp, which was in operation from 1900 to 1902, and includes the graves of those who died in the camp (The Heritage Portal, 2016). The Centurion History Society finds it difficult to make the required progress with restoring the tombstones as any work done in relation to the museum and memorial is funded and driven by the community.

A group of JCP students worked in the Irene Concentration Camp Cemetery. A historic part of the cemetery, which the students had to address, was restoring the tombstones of the original graves that were kept in a shipping container. These tombstones had been stored in an unorganised manner for many years, doing a disservice to the memories of those who had died in the camp. The students were assigned to make the tombstone more assessible to the broader public. In order to do this, they organised the tombstones so that any of the tombstones could be linked to records of the deceased. The tombstones were also organised more efficiently for any future projects that may be undertaken. The students digitised the gravestones so that they may be accessed anywhere in the world, even once the physical evidence may have weathered away.

The students removed all the tombstones from the container, cleaned them and placed new bubble wrap around them. They correlated the record of each person with the British Concentration Camp Database (University of Cape Town, n.d.). The students then wrote the unique ID of the deceased on a tag and attached it to the tombstone. They then took a picture of the tombstone and packed it back into the container in a more organised manner. Finally, the students developed a website (<https://www.ireneconcentrationcamp.co.za>) where they added more information about the concentration camp, as well as links to the relevant databases and the image database that they had created.

The students reflected as follows upon completion of the project:

*The fact that I was not even remotely aware of the past tragedies that had taken place there made the task of immortalising the memory of the place even more important...the thought dawned on me that many of these tombstones were sitting in a container where they might one day be forgotten, along with the people for whom they were made. I believe the value of the work we did was to help immortalise the memories of those who had died, for the community around the site, as well as for anyone else in the future.*

*The reality of working with only the physical remembrance of the people whose lives ended in that camp... We quickly realised that some of the gravestones are fragile and should be handled with care. What really had an impact on me was the differences that exist between the gravestones. Some are made by professionals, while others are homemade, most of the time because the family could not afford to have a gravestone made professionally. One other thing that had an impact on me was the incomplete dates on some gravestones. This is mostly due to the people in the camp not knowing what the date was at the time. The people in the camp were so disconnected with the outside world that even the date was unknown to them.*

**Image 1: Students in front of the container with some of the gravestones (with permission from the students and museum)**



Source: Photograph, Jason Kamps.

## **Smuts House Museum**

The last couple of years, the JCP students assisted with making an inventory list of all the books in the Smuts House Museum. They also scanned fragile documents, built shades for the tanks and cannons, and renovated and painted the railings of the veranda and the windows of the house. All projects were closely supervised and monitored by the curator of the museum.

One group decided to repaint the armoured vehicle that is part of the outside exhibition. Students from a previous year had built a shade over the armoured vehicle, a Marmon-Herrington MK IV. The students did a lot of

research on how to prepare an autobody surface for repainting. Their biggest challenge was to find the correct colour paint. The solution was to remove part of the vehicle where the colour was still in a good condition and send it to an auto paint shop to be scanned. The students then sanded and washed the vehicle with a pressure washer. The vehicle was repainted with a spray gun, the tyres were polished and the information board was redone.

The students reflected afterwards:

*This project was a great experience for me because of the fact that it was like opening a time capsule...working on the tank and restoring it as close to the original as we could.*

*We surprised ourselves with this project. I think we did exceptionally well. This project made me realise not to take museums and their history for granted. We should conserve our history for future generations.*

*...with a different perspective towards history and its importance of educating the next generations about the past.*

**Image 2: The Marmon-Herrington MK IV after renovation (with permission from the museum)**



Source: Photograph, Henco Venter.

## Swartkop Air Force Museum

Every year, students assist the Swartkop Air Force Museum to get it ready for its annual air show. An alumnus organised the 50 students into groups of five and made sure that all the hangars and exhibitions were cleaned and in working condition. Final-year students served as mentors and monitored the execution of the projects. This is one of the most popular projects of the module and students have to apply to be part of the project. Students are interviewed to determine if they have the correct focus and motivation to complete the project.

**Image 3: A group of students that were assisting with the maintenance of the Swartkop Air Force Museum (with permission from the students and museum)**



Source: Photograph, Sarthak Kokane.

Students reflected as follows on their experiences at the Swartkop Air Force Museum:

*It gives me a sense of pride, knowing that I am maintaining the beauty of these masterpieces. I loved witnessing the beauty of engineering in aircrafts and I learnt the responsibilities of looking after items.*

*In being able to help my community, I was able to see a side of it I hadn't previously seen. I often go to watch the air shows at the Swartkop Air Force base, but I never knew just how much preparation and effort goes into it until now. I was privileged to be in a team that was selected for this project, and I feel that my life has definitely been enriched by the whole experience.*

## Impact of the JCP module

Annually, more than 30 groups of JCP students are involved with a variety of projects at local museums. The curators, supervisors and alumni on site mentor and supervise the students. They ensure that the students become enthusiastic about preserving the artefacts and become knowledgeable about South African history. After completing the projects, the students reflect on how they became more aware of South African history and the role they played in preserving South Africa's heritage. Students also reflected that they were more engaged and had acquired various skills, including basic renovation, building or soft skills. Students always find their service more meaningful when they actually meet the needs of the community. A number of students continue as mentors for students in following years to continue the project at the specific museum. In return, the museums manage to maintain projects or exhibitions with the assistance of the JCP students.

## References

- Bielefeldt, AR and Canney, N 2014. Impacts of service-learning on the professional social responsibility attitudes of engineering students, *International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship*, 9:47-63.
- Jordaan, M 2012. Sustainability of a community-based project module, *Acta Academica*, 44:224-246.
- Jordaan, M 2013. A blended approach to service learning. The Faculty Engineering, Built Environment and Information Technology at the University of Pretoria, RNP Osman, Service learning in South Africa. Cape Town: Oxford Press.
- Jordaan, M 2014. Community-based project module: A service-learning module for the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria, *International Journal for Service Learning in Engineering*, 9.
- Jordaan, M and Mennega, N 2019. Engineering graduate attributes: Skills gained during a service-learning module, *The International Journal of Adult, Community and Professional Learning*, 26(1):21-34.
- Kamps, J 2019. EBIT JCP 2019 Group 199, Centurion Heritage Society [Video]. YouTube.
- Kokane, S 2019. UP EBIT JCP 2019 Group 21, Swartkops Airforce Museum [Video] YouTube. <https://youtu.be/TGCJexN-T1k>.

The Heritage Portal 2016. A short history of the Irene Concentration Camp Cemetery. Available at <http://www.theheritageportal.co.za/article/short-history-irene-concentration-camp-cemetery>. Accessed on 24 June 2020.

University of Cape Town, n.d. British Concentration Camp Database (BCCD). Available at <https://www2.lib.uct.ac.za/mss/bccd/>. Accessed on 23 June 2020.

Venter, H 2019. UP EBIT JCP 2019 Group 349 Smuts House Museum [Video]. YouTube. <https://youtu.be/LInL5EaQStA>.