

## The use of photovoice to improve student learning and engagement in communities

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Students are generally passive learners; as didactic lectures are the main form of teaching. This is in contrast to the more transformational and participatory student centered approaches, where students become co-creators of knowledge within the learning landscape. These pedagogies engage students as active, participatory learners who develop into critical thinkers. Group projects, role plays and simulations, have previously been utilized to enhance learning of Public Health at South African universities (Higgins-Opitz SB & Tufts 2010; Haffejee et al. 2017; Van Wyk & Haffejee, 2017). Photovoice commenced as a participatory research method, in which the research is a cooperative process between the researchers and participants, both of whom are actively involved in the research process and hence in co-creating knowledge (Liebenberg, 2018). It can also be used in teaching to improve critical thinking among learners (Haffejee, 2021).

The aim of this study was to use a photovoice project to:

- Ascertain environmental factors that are involved in causing disease
- Engage students in local communities to improve the environmental factors whilst showing how such improvement will improve health and wellbeing
- Ascertain the students views on such an engagement
- Decolonise part of a Health Sciences curriculum

### Methods

A photovoice assignment was presented to health science students registered for a module on Epidemiology: Public Health between. Students (n=23) working in self-selected groups were required to take photographs of factors within their own environments, which were involved in causing disease. Students within each group could either take the photographs individually or collectively as a group. Cellular phones, cameras, tablets or any other device that the students had could be used to capture the photograph. Field notes for each photograph were required. There was no limit on the number of photographs that could originally be taken. Subsequent to capturing the photographs, the group had to meet to discuss their photographs and field notes and thereafter decide on the best photograph for presentation in class and for a community engagement project. For the latter, students had to return to the locality to engage with the community or the environment in order to improve environmental conditions that impacted on disease. Photographic evidence of this engagement was required.

A discussion of the way in which the factors visible in the photograph, were involved in causing disease was required during the class presentation.

The following questions, associated with the letters in *PHOTO*, which were adapted from Capous-Desyllas & Bromfield (2018), guided their presentations.

1. Describe the picture? (P)
2. What is *happening* in the picture and how does it affect the health of people? (H)

3. Why did you take a picture *of this*? (O)
4. What does the picture tell us about the health of people living in the area? (T)
5. Can this picture provide opportunities to improve the health of those in the area? (O)

The lecturer, an independent assessor and fellow class mates posed questions at the end of each group presentation, which were assessed based on the picture, presentation quality, ability to answer questions. The assessment criteria have been described in detail (Haffejee, 2021).

### *Extending teaching and learning into research*

Following the presentations in class, focus group discussions were held to understand the students experience of this new pedagogic tool. Students were invited in their groups for these focus group discussions. Each focus group discussion lasted between 30-45 minutes.

Data was analyzed using thematic analysis, where the data was organized into themes and sub-themes using Tesch's eight steps of analysis (Creswell, 2014).

Ethical clearance was obtained from the Durban University of Technology Institutional Research Ethics Committee (IREC) prior to implementing the project (IREC 108/19). Gatekeeper permission was provided by the Director of Research at the university. All students provided written informed consent to be interviewed and for their data to be used as part of the research. Permission was also sought to audio-record the focus group discussion, which was subsequently transcribed.

### **Achievements**

There was an affirmative response to the use of cell-phone cameras to obtain photographs which served as data for the project. This positive experience and comfort with extending cell phone usage for education, was appreciated as facilitating learning away from the classroom. It was a cost effective way of introducing new learning.

Students documented the lived realities that caused disease, within their local communities. There was an emphasis on informal settlements and students articulated how the overcrowding in these settlements lets to communicable diseases spreading rapidly among the residents. The lack of piped water and sanitation was noted and linked to diarrhoeal and urinary diseases such as cholera, amoebiasis and bilharzia. The role of governmental structures was also recognized, particularly where lack of facilities led to deteriorating environmental conditions. Although portable toilets were provided in some areas, these were not emptied, leading to them not being used. This posed a danger of gender based violence, particularly at night when females went out to use the bushes to relieve themselves. Garbage collection was not existent leading to land pollution. As the settlements were often near a water source such as a river or stream, the pollutants eventually found their way into the water leading to downstream pollution. Students reflected on what diseases may emanate from these kinds of concerns, and also how to respond to them. This provided a more holistic approach to learning about community health rather than a teaching approach. The assignment promoted critical thinking and demonstrated that

learning can occur beyond the lecture room, collaboratively in local communities. It helped translate theory into practice

By engaging with the local community, the project allowed students to develop into adaptive and socially engaged graduates who were able to respond to local needs. Students initiated 'clean-up' programmes in the community. Some of them involved the local people to assist them in these initiatives. Another group recruited people through social media eg Facebook, WhatsApp & Instagram. Their learning thus promoted a green ecosystem by improving local environments. Many students put up posters to ensure sustainability. Letters were written to municipalities to improve service provision in the area. Overall, this demonstrated participatory and collaborative nature of photovoice and thus promoting social justice.

There was an emphasis on South African knowledge, which prepared students to work within their local and national context. This alternate pedagogy can thus be used to decolonize the curriculum so that students are responsive to local societal needs.

It also has the potential to produce graduates who are reactive to local requirements of the community. This project established the innovation of the curriculum whilst providing a distinctive education to students who engaged with society.

#### *Conference presentations*

**Haffejee, F.** (2021, November) The use of photovoice to decolonize the curriculum. Scholarship of Teaching and Learning (SoTL) in the South Conference 2021, Virtual conference, South Africa (Virtual Oral presentation)

**Haffejee, F.** (Accepted, 2022) Living in a shack: Decolonization of a Health Science Curriculum in the Context of South Africa *Conference of South African Association of Health Educationists (SAAHE)* – Oral Presentation

*The following presentations were made at university workshops:*

2022 (May) DUT Curriculum Conversation *The triangulation of teaching, research and community engagement in an undergraduate curriculum*

2022 (May) DUT Scholarship of Teaching and Learning (SoTL) *Teaching Public Health through the use of Photovoice*

2021 (July) – Induction programme at DUT (for newly appointed academic staff), *Photovoice: A new lens for the promotion of critical thinking whilst decolonizing the curriculum*

2021 (August) – DUT Curriculum conversation on decolonization, *Photovoice: A new lens for the promotion of critical thinking whilst decolonizing the curriculum*

This project won first position at the **Community Engagement Award** at the Durban University of technology in 2021. An award to the value of R25000 was won to continue with this work in 2022.

This project also won the **Vice Chancellor's award for Teaching and Learning** in the creative category

## Challenges

Funding was not available for this project. Some students had ideas of larger interventions where they would have liked to host educational drives, that required putting up a shelter for the intervention, but funding was needed for this. This challenge will be overcome with the 2022 cohort as the prize money that was awarded to me for the 2021 community engagement will be used to further the project in semester 2 of 2022.

## References

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