Experiential Learning Through Community Outreach Projects

Amy Mei Fun CHOONG

Department of Biological Sciences, Faculty of Science, 14 Science Drive 4, Singapore 117543

Corresponding Author’s E-mail: dbscmf@nus.edu.sg

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Extended Abstract

Introduction

Waste management in Singapore is a topic that few students think about. However, the issue is urgent. The only landfill left in Singapore, Pulau Semakau, is predicted to run out of space by 2035 if not earlier (Ministry of Water and Environmental Resources (MEWR), n.d.). Although Singapore’s overall recycling rate is 61% and has been going up steadily, household recycling rate is only 20% (based on the speech by the Minister of Environment and Water Resources, 2014). To prolong the lifespan of this last landfill, waste generation needs to be reduced and more recycling is needed urgently.

In order to provide students with a deeper understanding of waste management issues, a community outreach project for learning from real-life experiences was incorporated into the module GEK1515 “Environmental Biology”. The learning outcomes for the students, in carrying out this project, and all the preparation work leading up to the actual outreach, are: 1) to recognise the urgency of this issue and show how they are part of the problem as well as the solution; 2) to minimise waste and start to practice recycling if they haven’t done so already; 3) to influence the public, family and peers to minimise waste generation and start recycling too.

Using Experiential Learning As A Tool

Experiential learning, is defined by Kolb (1984), is "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (p. 41). According to Oxendine, Robinson and Willson (2004), experiential learning, when carefully designed, could allow students to relate to the subject matter in a way that is meaningful to their own lives. Bridges (1993) also noted that experiential learning could foster the development of transferable skills, such as communication, presentation, problem solving and interpersonal skills.

As experiential learning can develop so many useful transferable skills, it was adopted and translated into a community outreach project on recycling. To ensure a smooth execution of the project and that even work distribution, the whole project was broken into 6 mini parts. At the start, students were allocated into groups according to their residential postal codes, gender and language abilities. Each group consisted of 4-5 students with at least one from the opposite sex. Once they were informed of their grouping, they were to meet and then to submit their first meeting minutes. This was their first graded group assignment. The second group assignment was to design 5 posters which students would use to carry out door-to-door outreach to the public. The themes of the posters were

- **Poster 1**: Types and Percentages of Waste Generated Through the Years;
- **Poster 2**: Where Waste Goes After Disposal Into Bins;
- **Poster 3**: Pulau Semakau Landfill;
- **Poster 4**: Advantages of Recycling Against Throwing; and
- **Poster 5**: Types of Waste that Can or cannot be Recycled and How to Do It Properly

After students submitted their posters online, they received feedback on the accuracy of the poster’s content and attractiveness. The students then had to edit the posters and submit again. If the posters were considered error-free, then the students were to pick where they would go to carry out the outreach and submit a plan of execution. Once the plan was deemed acceptable, they could carry out the outreach and visit the required eighteen households. During the visit, they needed to document by taking photos and noting down the questions and concerns by the residents. After the outreach, students submitted a group powerpoint slide on each household and finally wrote a personal reflection of the whole project.

Through this project, students wrote in their reflections that it was refreshing to work with their classmates from different faculties and seniorities, with different working styles and benefitted from those who were more skilled at poster design. Furthermore, by carrying the research on waste management whilst they design the posters, they comprehended the waste flow process and what can or cannot be recycled and how to do it properly and translated this information clearly into poster format. By writing a group meeting minutes each time they meet, their efficiency and productivity increased as they could always refer to the minutes again so that there was no dispute. As students repeated the information to a minimum of eighteen households, they were able to remember the facts and to gain confidence in presenting to total strangers. They also felt a stronger sense of urgency and became more convincing to the public on the need to recycle. As the residents don’t always open doors to welcome them, students learnt to handle rejection and they empathise better with people who go knocking on doors to inform or conduct sales. Some students also wrote that they have started to minimise waste generation and become active recyclers as well as getting their family and friends to do likewise.

**Conclusions**

After two rounds of outreach carried out by students from two semesters, most students wrote that they enjoyed the experience as they were forced out of their comfort zone and the whole outreach process taught them many skills which they could use in their other modules as well as in their worklife. Furthermore, members of the public learnt more about the waste situation in Singapore and they now know what is the correct way to carry out recycling. The outreach has achieved the desired learning outcomes and taught students life skills too.
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References


