Integrating Volunteer Service in Undergraduate Learning

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ABSTRACT

In Summer 2006-2007, a volunteer service at the Hong Kong Wetland Park was included in two outreach courses, "IS01T Environmental Conservation of Hong Kong" and "SUST 071 Sustainable Development and the Environment". While field trips have been a common practice in some of our undergraduate teaching, the arrangement of volunteer service related to the course content was a teaching innovation in the University. The aim was to enhance the students' interest in environmental conservation, by coupling their knowledge obtained from the course with a volunteer service. Through this, students were exposed to a real-life environmental problem and they were offered a chance to tackle it. By engaging them in community service, students' awareness of environmental issues should be enhanced and they would be nurtured as responsible citizens.

Following positive feedback from students, our Teaching Team decided to expand this innovation into a more structured and longer-term enrichment program for our Biology undergraduates. This development responds well to the University initiative to offer more cocurricular activities and project oriented components in the "3+3+4" transition, in particular that the undergraduate curriculum should emphasize students' learning experiences in moral and civic education, community service and career-related experiences. In this paper, the design and the mission of the enrichment program will be reported.

Keywords

Environmental conservation, sustainable development, volunteer service, teaching innovation, Biology enrichment program

INTRODUCTION

While field trips have been a common practice in some of our undergraduate teaching, the arrangement of volunteer service related to course content was a teaching innovation in the University. In Summer 2006-2007, we collaborated with the Hong Kong Wetland Park to arrange some volunteer service for two outreach courses, "IS01T Environmental Conservation of Hong Kong" and "SUST 071 Sustainable Development and the Environment", which targeted secondary school students (F.1 to F.3) and high school students respectively. This paper focuses on the teaching experience from "SUST 071"

because it had a much bigger enrolment (hence a bigger sample size) and it was offered to high school students who were at an age closer to our undergraduates.

VOLUNTEER SERVICE AT THE WETLAND PARK

This innovative learning activity aimed at achieving three major objectives: (a) to facilitate the students' understanding of the course content, (b) to remind them of their roles in protecting the environment, and (c) to engage them in community service. First we experimented in two outreach courses during Summer 2006-2007: "IS01T Environmental Conservation of Hong Kong" (13 enrolments; offered by the Education Development Program, School of Science), and "SUST 071 Sustainable Development and the Environment" (31 enrolments; offered by the "Summer@UST 2007" Program, Office of the Vice-President for Academic Affairs)

The "SUST 071" students were tasked with removing a non-native weed, "mile-a-minute" (scientific name: *Mikania micrantha*), from an area in the Wetland Park. "Mile-a-Minute" was introduced from South America and has been widely distributed in India, SE Asia, the Pacific islands and South China including Guangdong and Hong Kong. It has invaded many places in Hong Kong including some protected areas, and has caused detrimental effects to our natural environment.

STUDENTS' FEEDBACK ON THE VOLUNTEER SERVICE

(1) Student "A"

"To be honest, the voluntary work was undoubtedly the most memorable, meaningful, intriguing and educational experience that I ever had. It allowed me to further understand the topic we were discussing during lessons and to be more familiar with the subject -- the environment of Hong Kong. Besides, field trips are always important when learning subjects that require first-hand study like the environment and the other science subjects. This volunteer service was not only a field trip for me as field trips usually just study the environment, but for this service, we needed to work personally.

I have gained more knowledge and collected more detailed information about sustainable development and the environment in Hong Kong. If everyone in Hong Kong can give a hand and contribute through similar volunteer service, environmental development in Hong Kong would become sustainable."

(2) Student "B"

"Hands-on practical experiences will help form a better understanding of what we are studying by welding a more vivid picture in the mind. It makes us aware of nature's importance in society and how the influence of human activity can have detrimental longterm effects on nature - the two cannot be separated.

I have learnt that we should think of sustainability - for our future generations - instead of being selfish and only doing things for the likes of ourselves currently."

(3) Student Leader from the Summer@UST Program (an undergraduate of our University)

"The Wetland Park volunteer service not only enhanced students' understanding of and interest in the course, but also raised our awareness of environmental conservation and its importance.

Volunteer work should be scheduled as a long-term service. The influence of one-day participation mainly lies in the experience itself, which leads to students thinking further about the meaning of volunteering.

Most students and I regard this experience as a special highlight of the program [Summer@UST]."

"ENRICHMENT PROGRAM FOR BIOLOGY STUDENTS"

Because the volunteer service proved useful in enhancing the students' learning experience, our Department of Biology incorporated the activity in our undergraduate teaching and restructured it as the "Enrichment Program for Biology Students". This program, jointly organized with the Wetland Park, will be launched in January 2008. Apart from doing volunteer service, the participants will receive practical training offered by the Wetland Park educational unit. They will then serve as ecotour guides and exhibition interpreters at the park. Furthermore, the students will design a booth for a presentation for the "World Wetlands Day", an important international event about wetland conservation, held at the park on 2 February 2008. Students will be required to share their knowledge by organizing a volunteer service and a guided tour for other Biology students.

The Enrichment Program aims at nurturing and developing students' potential and to create applicable knowledge in order to support sustainable development. Through this activity, students are expected to develop a genuine interest in our natural environment and its biodiversity. This can inspire them to appreciate nature from macroscopic aspects (while many courses in our curriculum focus on microscopic aspects). The program also aims to:

- 1. Show students how to connect their knowledge from our environmental courses to reallife situations and to apply the knowledge gained in solving environmental problems.
- 2. Produce graduates who are responsible citizens, protecting our environment.
- 3. Equip those who plan to pursue a career in environmental aspects.
- 4. Nurture team spirit, responsibility and communication skills among our students.
- 5. Strengthen our Biology curriculum for "3+3+4" reform that emphasizes a broad and balanced education, as well as students' learning experiences in moral and civic education, community service and career-related experiences.

We have formed a Teaching Team in our Department to facilitate the operation of the Enrichment Program and to monitor the students' performance. Evaluation of the Program will be conducted at different stages through the collection of students' feedback. We will

revise the program's content if necessary. We anticipate that the Enrichment Program will enhance our students' overall interest in and awareness of environmental conservation.

SUMMARY

The integration of volunteer service in the summer outreach courses showed that the activity could enable students to better understand the course content, stimulate them to think critically about their roles in sustainable development and environmental protection, as well as to provide them with a chance to do community service. Because this outreach activity can enhance the students' learning experience, our Department of Biology has restructured it and will launch an "Enrichment Program for Biology Students" aimed at practical training of our Biology undergraduates and the nurturing of their team spirit, responsibility, as well as communication and problem-solving skills. Furthermore, the participants' experience of working in the natural environment will bring about better appreciation of nature. We believe that this Enrichment Program can strengthen our Biology curriculum for the "3+3+4" educational reform.

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