

A Teaching Innovation: Integrating Volunteer Service in Undergraduate Learning

Teaching Team from **Department of Biology**:

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Outline

- **Our Teaching Innovation**
 - Objectives
 - Courses involved
 - Content
- **Students' Feedback**
- Expansion of the Teaching Innovation
 - **“Enrichment Program for Biology Students”**

Major Objectives of the Teaching Innovation

1. To facilitate the students' understanding of the course content
2. To remind the students of their roles in protecting the environment
3. To engage the students in community service

Courses Involved in the Teaching Innovation

Two **outreach courses** (Summer 2007):

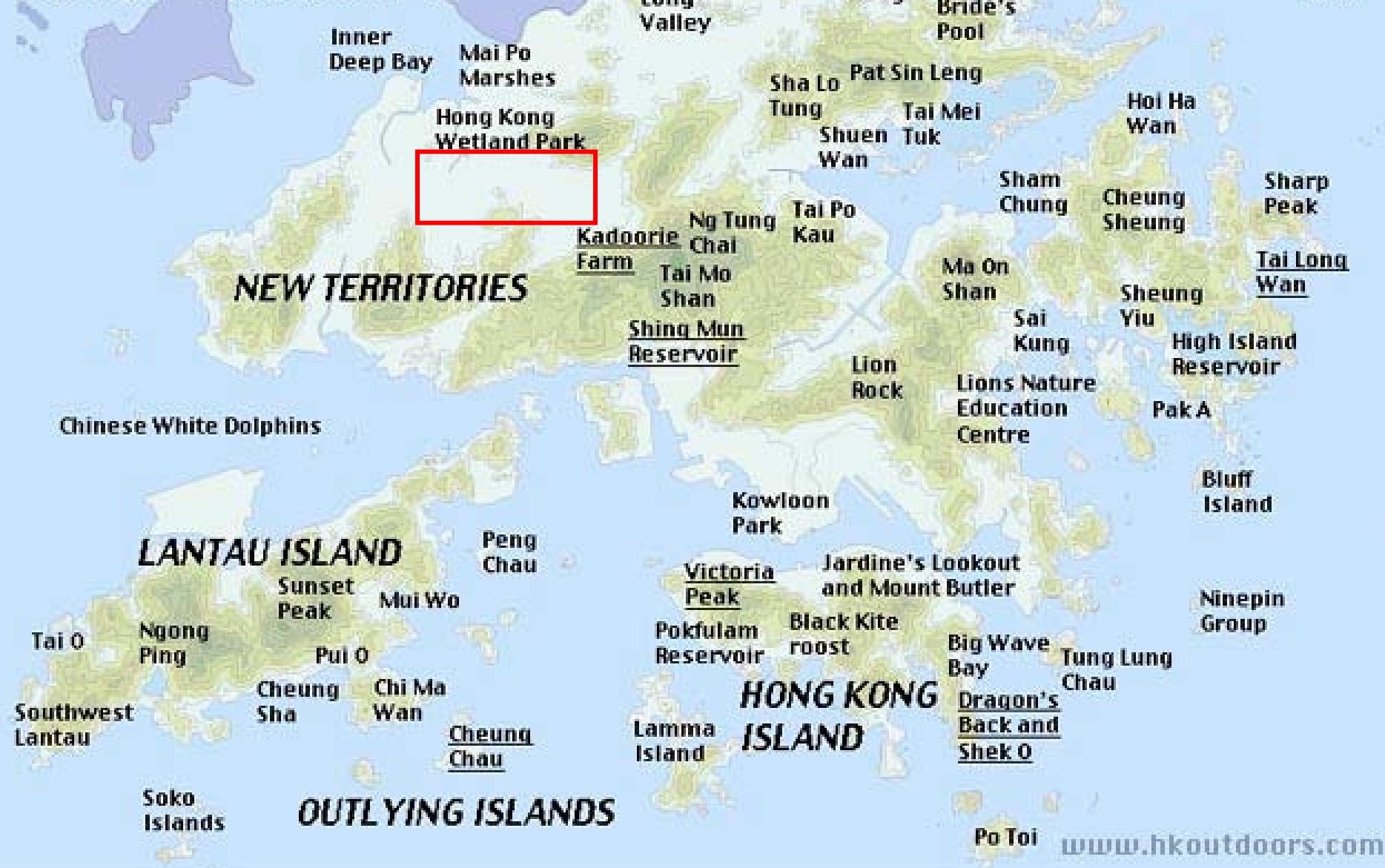
- **“IS01T Environmental Conservation of Hong Kong”**
(Education Development Program, School of Science)
- **“SUST 071 Sustainable Development and the Environment”**
(Summer@UST 2007, VPAAO)

Volunteer Service



Hong Kong Wetland Park (HKWP)
(Agriculture, Fisheries and Conservation Department)

Hong Kong's Great Outdoors



Mile-a-Minute 薇甘菊

- *Mikania micrantha*
- Introduced from South America, now widely distributed in India, SE Asia, Pacific islands and South China including Guangdong and Hong Kong
 - Has well established in Hong Kong and invaded many places including some protected areas (e.g. country parks and Mai Po Nature Reserve)
- Has significant damage on local biodiversity





Mile-a-Minute invading HKWP



Students removing
mile-a-minute in HKWP



Students' Feedback (1)

Student "A" taking "SUST 071":

“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 in learning subjects that require firsthand study like environment and the other science subjects. This volunteering service was not only a field trip to me as **field trips usually need to study the environment only, but for this service, we need to work personally.**

I have gained more detailed information and knowledge about the **sustainable development and environment in Hong Kong.**

If everyone in Hong Kong can give a hand and contribute in similar volunteering service, the environmental development in Hong Kong would be able to sustain.”

Students' Feedback (2)

Student "B" taking "SUST 071":

“Hands-on practical experiences will help form a better understanding of what we are studying by welding a more vivid picture in mind.

It makes us aware of nature's importance in society and how the influence of human activity can have detrimental long term effects on nature - the two cannot be separated. I have learnt that we should think sustainably - for our future generations - instead of being selfish and only do things for the likes of ourselves currently.”

Students' Feedback (3)

A Student Leader (a UST undergraduate) in the Summer@UST Program:

“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 on experience itself, which leads to students' further thinking of the meaning of volunteering.

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

Application and Potential of the Teaching Innovation

“Enrichment Program for Biology Students”

- Launched by Department of Biology
- January – June 2008

Team Work

- A **Teaching Team** is formed under Department of Biology
- **Joint project** with the Hong Kong Wetland Park (HKWP)
 - Training provided by HKWP
- **Student performance will be assessed** by UST Teaching Team and HKWP

“Enrichment Program for Biology Students”

Through the Enrichment Program, students will be

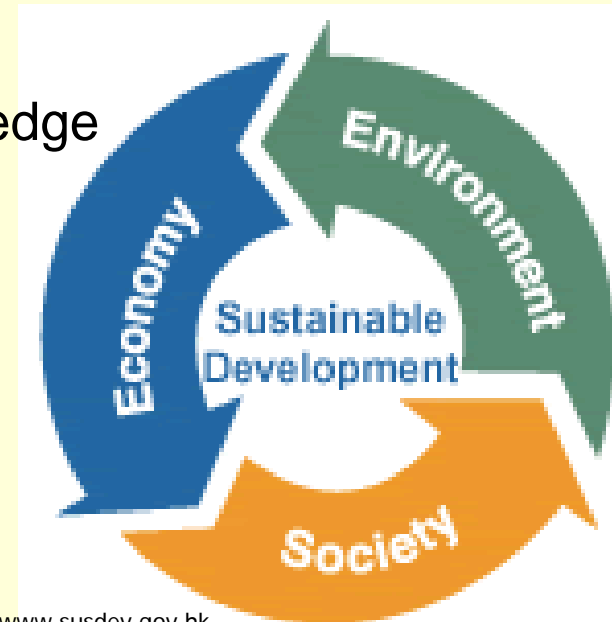
- Trained as **Ecotour Guides and Exhibition Interpreters** at HKWP
- **Giving presentations** on “World Wetlands Day” (2 Feb 2008) at HKWP
- **Organizing a volunteer service** at HKWP for other Biology students



Mission of the Enrichment Program

To nurture and develop the potential of the students and to create applicable knowledge in order to support **sustainable development** in the society.

1. Through **reaching out to the natural environment**, the students are expected to develop a genuine and sustainable interest in our natural environment and the biodiversity. This can inspire them to appreciate our nature from **macroscopic** aspects (while many of our courses focus on microscopic aspects)
2. To facilitate the students to connect their knowledge from our environmental courses to the **real-life situations** and to apply the knowledge in **solving environmental problems**



Mission of the Enrichment Program (cont)

3. To produce graduates capable of being **responsible citizens** in protecting our environment
4. To equip those who plan to pursue a **career** in environmental aspects
5. To **strengthen our Biology curriculum for 334 reform** that emphasizes on
 - a **broad and balanced education**
 - students' learning experiences on **moral and civic education, community service** and **career-related experiences**

Summary (1)

1. The integration of volunteer service in the summer courses showed that the activity could enable the 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 engage them in **community service**.
2. The **Department of Biology** has formed a **Teaching Team** to deliver the “**Enrichment Program for Biology Students**”. The Enrichment Program is expanded from the teaching innovation and it provides **job training** for the students and opportunities for the students to enhance their **communication skills, team spirit and responsibility**.

Summary (2)

3. Through the Enrichment Program, our Biology students are expected to have more opportunities to **reach out** to and develop a **genuine interest** in our natural environment. They are also anticipated to have enhanced **awareness of real-life situation** and **problem-solving skills**.
4. The Enrichment Program can strengthen our Biology curriculum for the **334 reform**.