# Experiencing Ecological Sustainability in Metropolitan City

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#### Course design rationale

- Traditionally, field-based learning on ecological sustainability stress the importance of learning in the natural environment.
- However, given that young people of this generation spend most of their time within a metropolitan environment, it is worthwhile to explore how we can facilitate the development of awareness of ecological sustainability within a metropolitan context.

# Experiential Learning and ecological sustainability

- Clear links in literature about the importance of EXPERIENCE in learning for sustainability, particularly when dealing with attitudes formation
- e.g. transformative learning
- Field-based learning, place-based learning, etc.

# Reflection video by student

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• <u>https://www.youtube.com/watch?v=hXewfB9FdD8&feature=youtu.b</u>

### **Course Intended Learning Outcomes**

- CILO1 Identify the principles of ecologically sustainable environment and the facilitating role of human.
- CILO2 Appreciate the importance of ecocentric worldview and experience in learning ecological sustainability.
- CILO3 Examine the role of different stakeholders in enhancing ecological sustainability in urban environment in both local and global context.
- CILO4 Demonstrate basic competencies in creating field-based learning activities with ecological observation components.

## Learning Activities

#### Part 1

- Eco-garden exploration
- Organic farming and aquaculture

#### Part 2

- Guided eco-tours x 2
- Trail walks in EduHK campus

#### Part 3

- Designing Field-based learning workshop
- Group based trial run of field-based learning packages
- Group presentation and sharing

#### Assessment

- Group project
  - Proposal 20%
  - Demonstration and Presentation 10%
  - Final teaching package 10%
  - Peer evaluation and reflective statement (<200 words) 10%
- Individual self-reflective journals (4 x 500 words each) 40%
- Participation in activities 10%

# Exploring Eco-garden



# Organic Farming and Aquaculture









# Eco-tour guided by NGO on Tree Conservation



## Planning Eco-trail walking in EDUHK campus







Ses & Sports Comp

# Eco-tour guided by NGO on bird-watching



# Trials of Field-based Learning Ideas





video





### Quotes from Students' Reflection

• "I enjoyed the experience of designing the field-based learning. .....

Overall, this course is successful in raising my awareness of environmental sustainability. It not only taught me some theories and knowledge about environmental sustainability but also provide me with a practical learning experience to strengthen and reflect what I have learnt in the lectures."

"On field-based learning, ...... I found this method of learning is surprisingly effective. Unarguably, this method is so much fun and exciting.... During the trips outside the classroom, these hand on hand experiences give students the chance to relate what they are sensing, like sight, hearing, smell, touch, to what they are learning. Thus, deepening their impression towards the knowledge."

### Quotes from Students' Reflection

- "To conclude my feeling towards the overall experience, it would be an exhausting, yet fun, innovative and beneficial learning experience. ...even though there are a lot of work to do, the harvest of the course is fruitful ....."
- "this course provides a joyful experience for me and I did enjoy the process of learning in this course."

# Reflection of the Teaching Experience for the pilot course

- Overall very valuable, encouraging teaching and learning experience.
- Tension in pedagogical design -- "Should I teach more" vs "Let student find it out themselves"
- Flexibility is crucial in course delivery (e.g. contingency in scheduling), prepare for unexpected.
- Stories are very useful vehicles in experiential learning.
- Social media and Social Networking Service (e.g. Facebook) are useful too.

## Sharing of Current issues via FB group

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# Facilitating Student Reflections via spontaneous discussion

- During a site visit, a student asked "How can we use that tree?" ("這 棵樹有甚麼用?")
- → Taoist idea of "use of uselessness" (無用之用)
- → Discussion of anthropocentric vs ecocentric idea.

#### Rooms for Improvement

- Connections between their local experience and the global picture of ecological sustainability needs to be further strengthened.
- Motivation of students could still be enhanced particularly during the beginning of the course.
- Students needs to be reminded of the time schedule for site visits early in the course.
- Arrangements for student group filed based visits can be better. Enough time should be allocated for all groups to conduct their trial runs with their fellow students.
- More guidance for assessment task while also maintaining students ownership of their original ideas.