

Experiencing Ecological Sustainability in Metropolitan City -- the pandemic experience

Sharing session 17 Dec 2020

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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.

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

Original Plan

Part 1

- Course introduction and Eco-garden exploration
- Organic farming (2 lessons)
- 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 (3 sessions)
- Group presentation and sharing

Revised schedulee

Part 1

- Eco-garden exploration
- Organic farming (2 lessons)

Part 2

- Designing Field-based learning workshop
- Assignment consultation

(Class suspension March to early June)

- Guided eco-tours x 2

Part 3

- Group based trial run of field-based learning packages (3 sessions)
- 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%

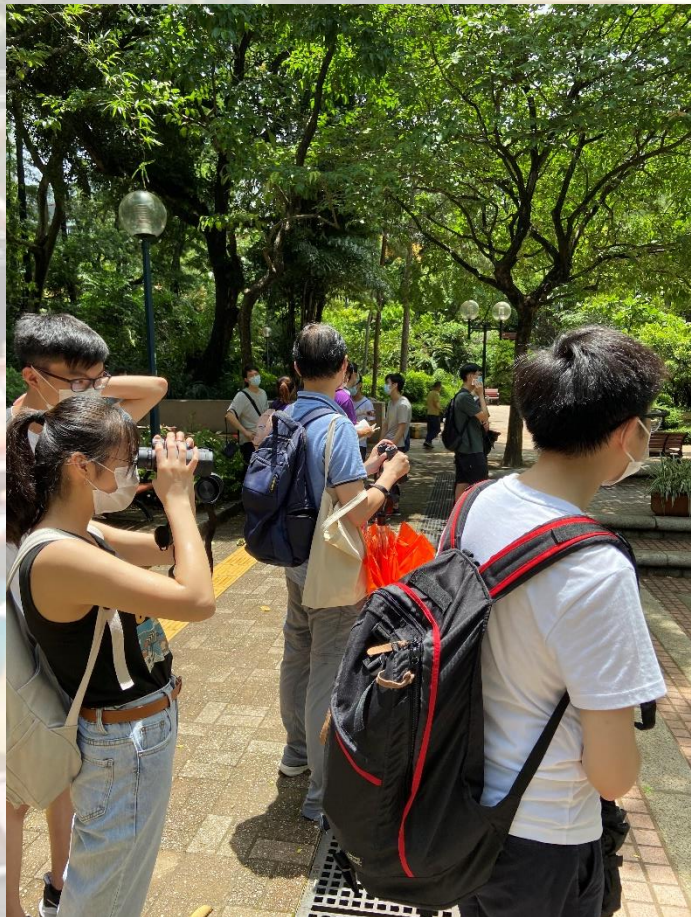
Organic Farming



Eco-tour guided by NGO on Tree Conservation



Eco-tour guided by NGO on Tree Birdwatching

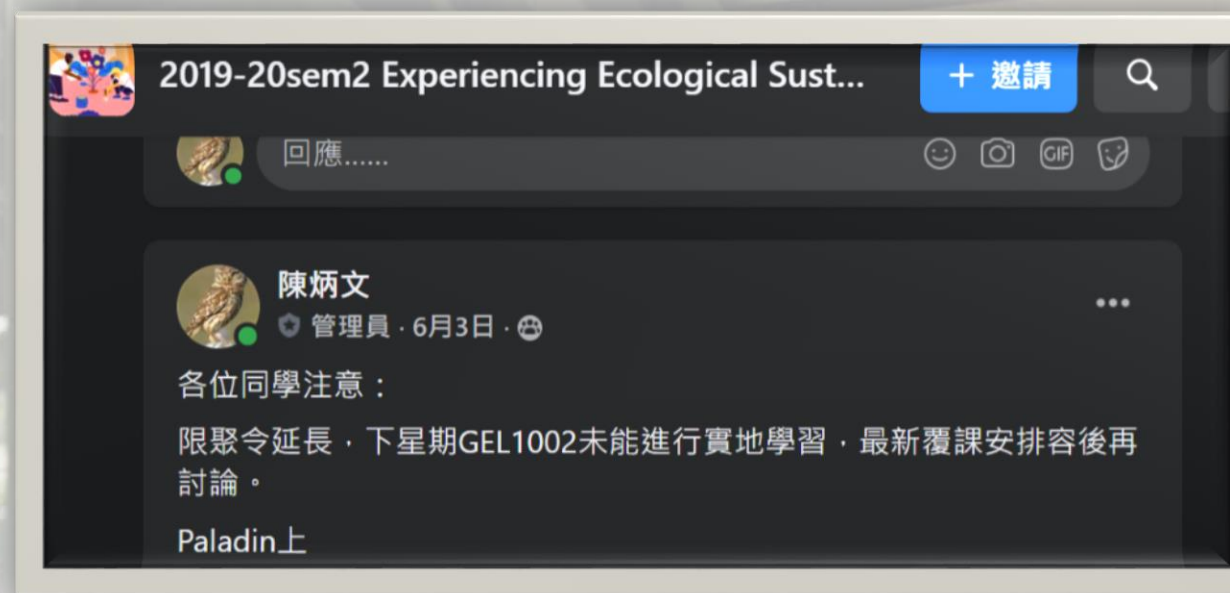


Trials of Field-based Learning Ideas



ELC during Pandemic

- The situation faced by the second pilot run of GEL1002 in the second semester of last academic year was much more challenging because of the pandemic situation.
- As the pandemic situation developed, face-to-face teaching was suspended in early February after the course had only started for three weeks.
- While other courses can be easily converted to online mode of learning, such online delivery is quite inconsistent with the emphasis of field-based learning experience of this course.
- I chose to delay the delivery of the remaining field-based activities until the pandemic situation temporarily stabilized.



Rescheduling of learning activities

- After face-to-face teaching was suspended in Feb, it is necessary to schedule some of the learning activities.
- By mid-March, all the preparation works for field-based learning and project has been conducted online.
- Lesson is suspended between mid March to late May to wait for opportunity to resume field-based learning.
- Some groups choose to conduct pre-trip for their group projects, but later also need to stop because of the government's restriction on gathering.

After the long break...

- When the field-learning activities can finally resume in **mid June**, the interruption had some negative impacts on the learning atmosphere
- By that time, the weather had become much **hotter**. Trips that were originally planned for spring become less enjoyable in early summer.
- **Hot weather** together with **face masks** during field trips had also made the learning experience less enjoyable.
- Some students were also unable to attend some of the field-based activities due to other commitments.
- Despite all the difficulties we faced, the course is still satisfactorily concluded in mid July.

Quotes from Students' Reflection

- Feedback from student appreciated my insistence to implement field-based learning despite the difficulties.
- “我認為這一科對我學習最有幫助的地方，在於很多時做我們用的學習方法，都是以體驗為本的。我認為這個學習方法讓我對學到的知識有更深刻的印象。所以很感謝老師在這個時間仍然堅持用實地的形式去進行教學活動，對我來說是一個很難忘的學習經驗，也得益了很多。”

Quotes from Students' Reflection

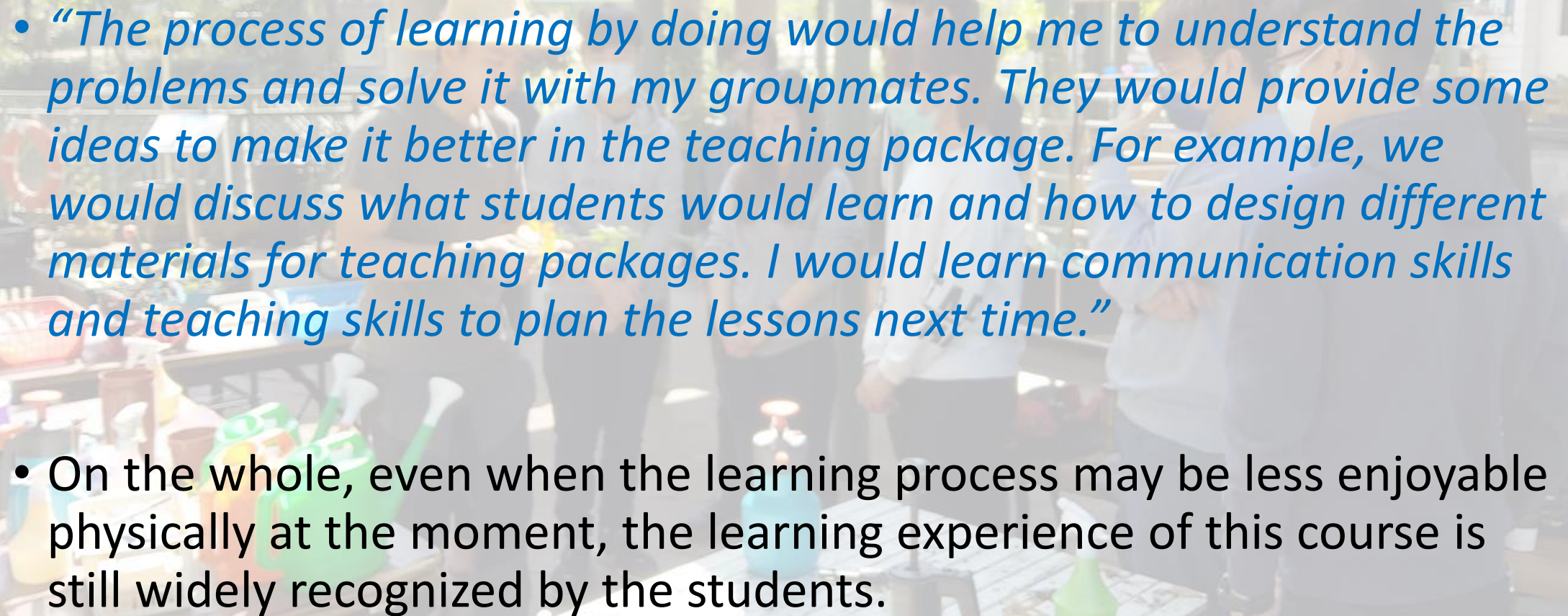
- *“I really enjoy the experiential courses in the past few months. There are many activities that impress me a lot. Planting vegetables in the eco-garden gives me more information about organic farming and the historical development of agriculture in Hon Kong. Preparing the eco-tour gives us different chances of appreciating the natural environment and find out those places which may not be well-known by the public. Leading the tour and preparing the materials for teaching package lets us have much more thinking and experience of holding the interactive activities.”*

Students comment on the learning process

- *“this experiential course had deepened our skills or knowledge of learning by doing. We may have plenty of ideas that we have learnt from the textbook or online materials, but sometimes our experiences could also give us a lot of useful information. It is an effective way to establish or build the atmosphere of learning new things by combining our observations and reflections through our experience.”*

Another student's reflection

- First I did a farmer work in school likes we farming and plant some vegetable at school that teach us how does it works and how hard did the farmer facing in their daily work life. It is a fun experience that I think it teach me a lots so I hope that if I have another farming time, I thinks I will use the skill and knowledge that I have learnt at this course and I find that I have a little bit interest about farming. Because this is very fun and meaningful. Although the works are very hard that may let someone feel tried after doing the farming work, I think that this is a very useful experience that not too many people or student know what the farmer work on everyday, and their works let us have the yummy vegetable to eat, if you do not finish the meal everyday that means you are wasting the sweat of the farmer so just remember yourself that do not waste the food anymore.

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- The background image shows a group of people in a workshop or classroom setting. There are several tables with various items on them, including water bottles, containers, and what looks like a small stove or heater. The people are engaged in some activity, possibly a lesson or a practical exercise. The overall atmosphere is one of a hands-on learning environment.
- *“The process of learning by doing would help me to understand the problems and solve it with my groupmates. They would provide some ideas to make it better in the teaching package. For example, we would discuss what students would learn and how to design different materials for teaching packages. I would learn communication skills and teaching skills to plan the lessons next time.”*
 - On the whole, even when the learning process may be less enjoyable physically at the moment, the learning experience of this course is still widely recognized by the students.

Reflection of the Teaching Experience for the pilot course

- Even when the implementation of second cohort of this course is significantly interrupted by pandemic in the period, students still consider the overall learning experience positive, as shown by their reflective journals.
- The power of experiential learning is very clearly demonstrated. Even the “difficult”, “hard work”, “tiring” experience create deep learning. Guidance and coaching from teacher is important in the reflection process.
- If this course has to be delivered through online mode, most of the learning activities needed to be vastly changed. The learning experience will be vastly different from the current design.



Thank you!