

Impacts of Eco-Garden and its activities on knowledge transfer on environmental and sustainability education

Ecogarden Team:

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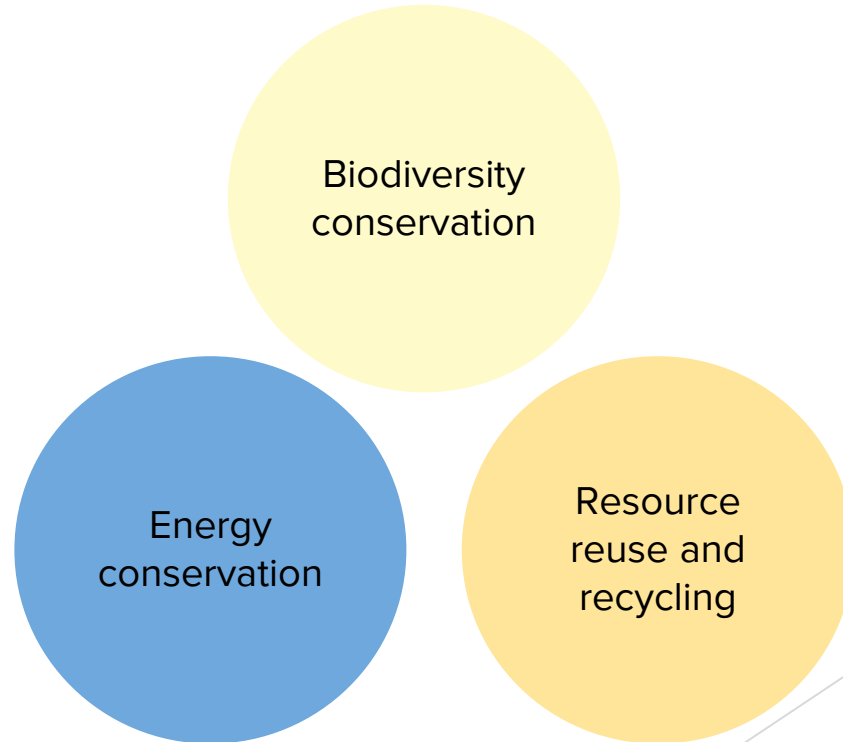
The ideas of Eco-Garden

- ↳ serves as a physical base and a pedagogical tool to showcase sustainability and promote sustainability education
- ↳ provides an education model that emphasises field-based learning
- ↳ accomplishes our global environmental commitment through relevant research studies and educational programmes



Overall design of Eco-Garden

Three major elements:



Video about Eco-Garden

<https://www.youtube.com/watch?reload=9&v=H21iYxyTeHU>

Component facilities: biodiversity conservation

Butterfly garden:

↓ Hosts plants:



Umbrella tree



Sago Palm

↓ Nectar plants:



Ixora



Bay biscayne
creeping-oxeye

Component facilities: biodiversity conservation

Butterfly garden:

↓ 108 species were recorded (45% of the total species in Hong Kong)



Indian Fritillary



Common Birdwing (under the protection of 'Wild Animals Protection Ordinance')

Component facilities: biodiversity conservation

Ecopond and constructed wetland:

- ↓ Provides a freshwater environment and diversified habitat to support different kinds of organisms
- ↓ Dragonflies, damselflies, amphibians



Component facilities: energy conservation

- ↳ Solar power system:
 - ↳ Photovoltaic panels
- ↳ Wind power system:
 - ↳ Vertical axis wind turbine



Component facilities: resource reuse and recycling

Aquaponic system :

- ↓ Consist of 3 parts: terraced field, constructed wetland and ecopond
- ↓ Ecopond demonstrates aquaculture
- ↓ Water with nutrients will be pumped to the terraced field and constructed wetland for plants absorption



Component facilities: resource reuse and recycling

Rain garden:

- ↓ demonstrate the capturing and filtering of rainwater using sand and plants
- ↓ allows infiltration into the ground for plants absorption



Component facilities: resource reuse and recycling

Composter:

- ↓ Stores plant litter and allows decomposition into composts

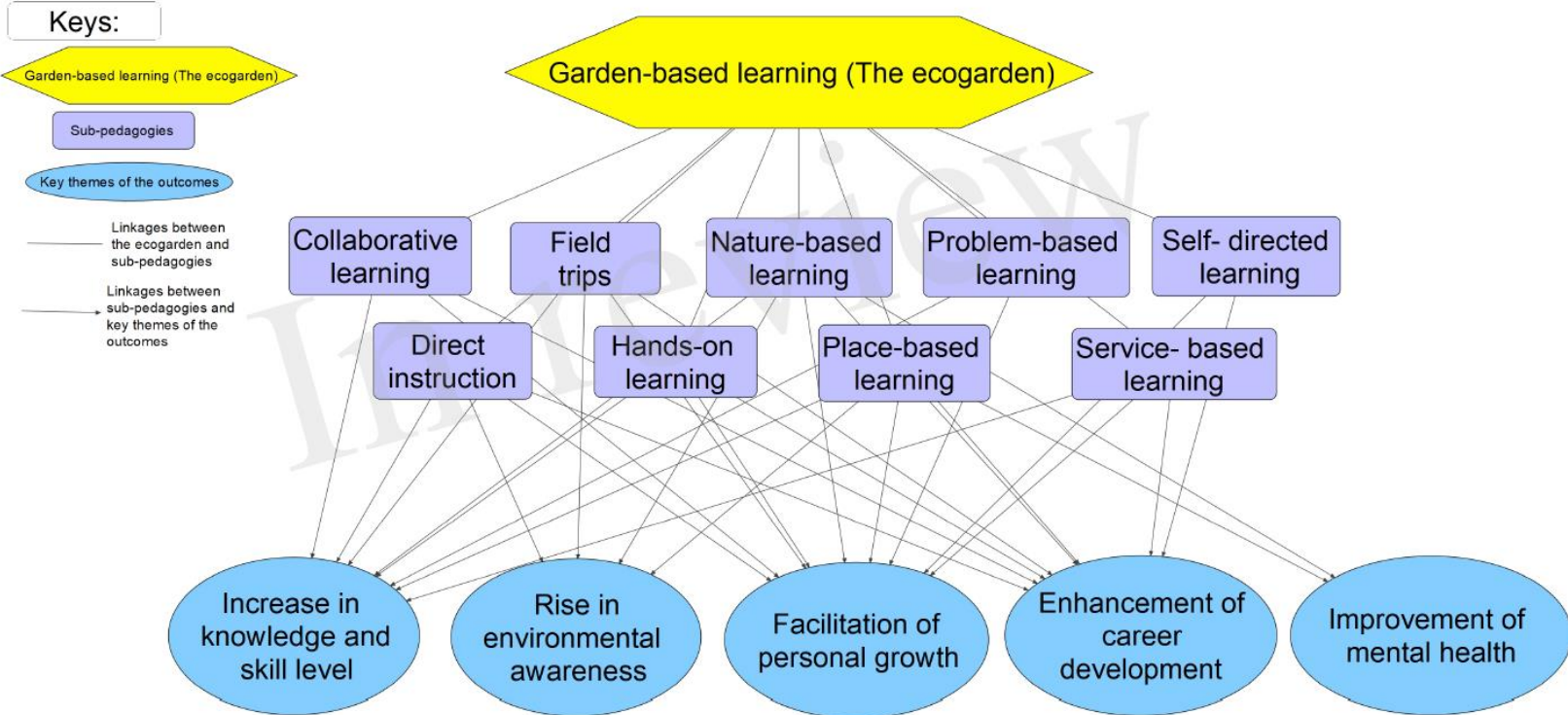


Component facilities: organic farmland

↳ For experiencing and practicing the skills of organic farming



Pedagogies involved in the Ecogarden-based pedagogies



Education in Ecogarden

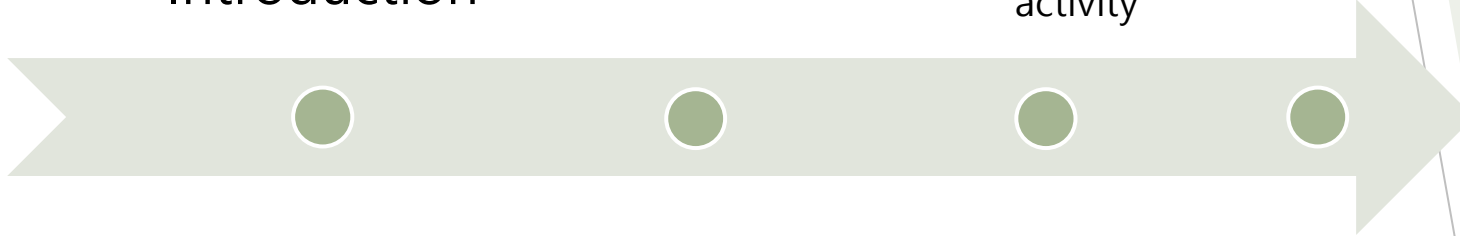
Example module

Introduction

Guided tour

Experiential
activity

Reflection



Educational activities: community level

Eco-Festival (AFCD):

↳ Ting Kok + Whole Year Appreciation 2016 Spring: Experiencing Aquaponics in Eco-garden



Educational activities: community level

Hong Kong Science Festival:

- ↓ ecological guided tour and demonstration of aquaponics and organic farming



HK
SciFest
香港科學節

Educational activities: community level

The Jockey Club Youth Academy for Special Educational Needs (September 2020):

- ↓ An Eco-garden-based course for students with Special Educational Needs (SEN)
- ↓ Management of Eco-garden, organic farming, aquaponics and biodiversity surveying
- ↓ Hands-on organic farming workshop, outdoor learning

上課及入學安排

上課時間： 學校開辦自電課程，每作於上午9時至下午3時期間上課，個別異常課及工作坊類亦會於課後，與學校課程同時進行。

學 期： 每學年分上、下兩學期。

上課地點： 香港教育大學大埔校園教育專業學習中心
(學生須自行到該上課地點，不設交通接駁。)

入學申請： 為於每年3-4月間進行招生，申請人須接受面試甄選。

學 費： 本學期課程費用全免。

證書

參與學員完成課程的課外課後效果，方可獲頒發證書。

查詢

如有查詢，歡迎與本中心職員聯絡

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特殊教育及專業服務綜合中心

傳真：2944 2905

網頁：http://www.edu.hk/yasen/

計劃簡介

隨著教育政策及融合教育的發展，有特殊教育需要學生在3-5年學制下，均可以有半部或全部修畢中或六年級中或高中課程，然而，由於部分特殊教育人士及殘疾學生的特殊需求，未能融入學業，繼續修讀，而大部份的特殊學生，亦非五智特學生，未能有合適的專上教育機會，持續學習，為進入職場做好準備，以應付未來工作的需要。

透過合辦專中半高中部專修班向政府及社會，展現這所大學特殊學習需要與融合教育中心，獲得香港教育局及香港特教局的機會的認可，成功申請2019年度「行政長官社會服務計劃」，把創設專中半高中部特教專修班，為中心之設置，獲得社會各界支持，為有特殊學習需要的殘疾學生，提供繼續修讀，提供學習機會，計劃為期三年，目前正進行一系列由資料蒐集及諮詢開始，進行學習評估，計劃為期三年，目前正進行一系列由資料蒐集及諮詢開始，獲得社會各界支持，為有特殊學習需要的殘疾學生，提供繼續修讀，提供學習機會，計劃為期三年，目前正進行一系列由資料蒐集及諮詢開始，獲得社會各界支持，為有特殊學習需要的殘疾學生，提供繼續修讀，提供學習機會。

主辦機構：香港教育大學
The Chinese University of Hong Kong

合辦機構：香港教育專業人員協會
The Hong Kong Society for Human Resource Professionals

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Educational activities: school-level

Ecogarden : Experiencing and Experimenting

- ↙ Hong Kong Biodiversity Festival (AFCD)
- ↙ Field-based learning program for primary and secondary schools
- ↙ Docent service on eco-garden with workshops on organic farming, aquaponic system or biodiversity



香港教育大學
The Education University
of Hong Kong

香港教育大學科學與環境學系 主辦

遊園學藝2020

生態導賞及環境教育活動



活動詳情：

對象：中學生（中一至中六）

小學生（小四至小六）

（以學校為報名單位）

費用：全免（本活動由漁農自然護理處資助）

地點：香港教育大學大埔校園

日期：2020年10月至2021年3月

（詳細日期請參閱網上報名表格）

時間：上午時段：10:00-13:00

下午時段：14:30-17:30

名額：每節30人

活動內容：

1. 教大生態導賞

參觀生態園，有機耕地，
人造濕地及魚菜共生設施等

2. 生物多樣性講座

3. 體驗活動（三選一）

生態園大探索：生態研習

小小農夫：有機耕作體驗

魚菜共生：組裝魚菜共生系統

主辦機構：



活動查詢：

電話：2948 8388 電郵：chonan@eduhk.hk
陳可善女士

網上報名：

<https://rh.gy/dtst0q>



Educational activities: school-level

School visits and collaborations

E.g. Litte Interpreter Programme in EdUHK Jocky Club Primary School.



Educational activities: undergraduate-level

Internships:

- ↓ Service based learning on sustainability, education and planning

Co-Curricular and Service Learning Course

- ↓ GEM1026 Conservation and Ecotourism and other courses...
- ↓ Authentic learning platform



Educational activities: undergraduate-level

Eco-garden farmers and biodiversity surveyor

Training stage:

- ↓ Lectures, field trips and hands-on sessions on various topics (eg. organic farming, aquaponics, ecological survey and docent techniques)



Educational activities: undergraduate-level

Eco-garden farmers and biodiversity surveyor

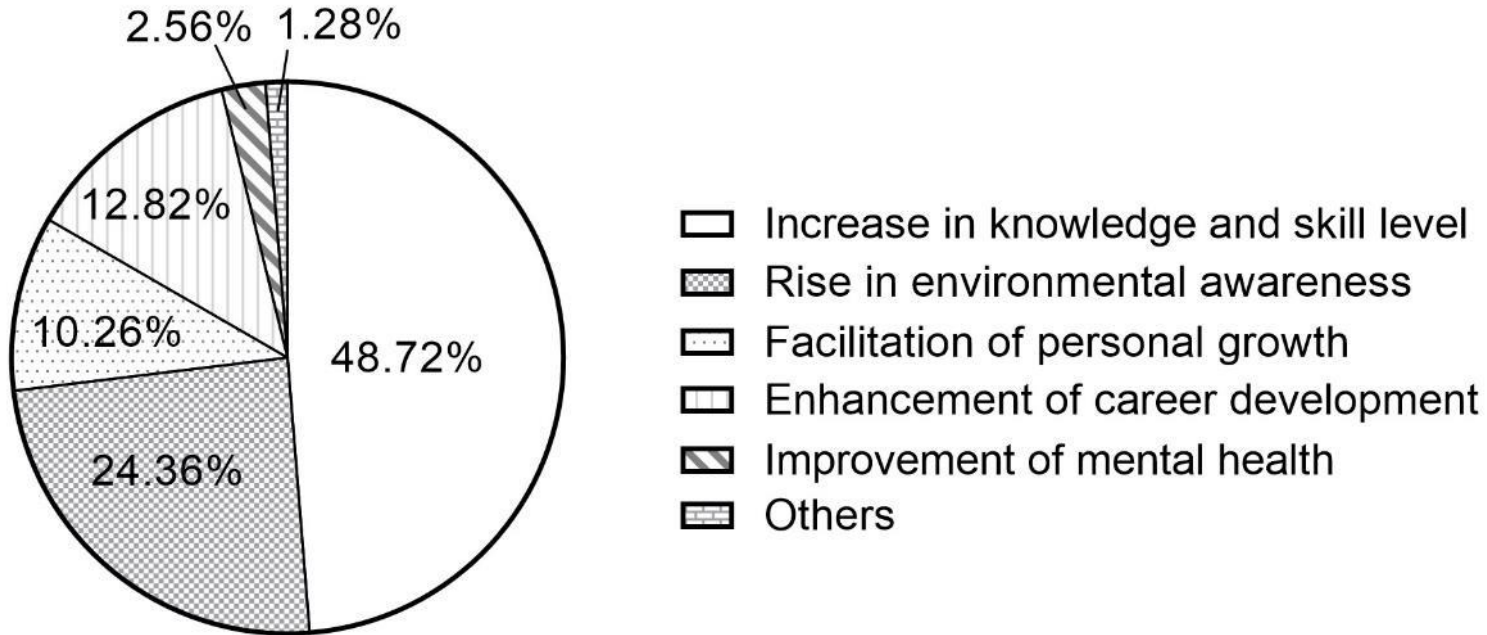
Practice stage:

- ↓ assisting in managing the eco-garden (eg. farming, maintaining infrastructures)
- ↓ serving as tour guides/docents
- ↓ designing and implementing Eco-Garden-based teaching modules



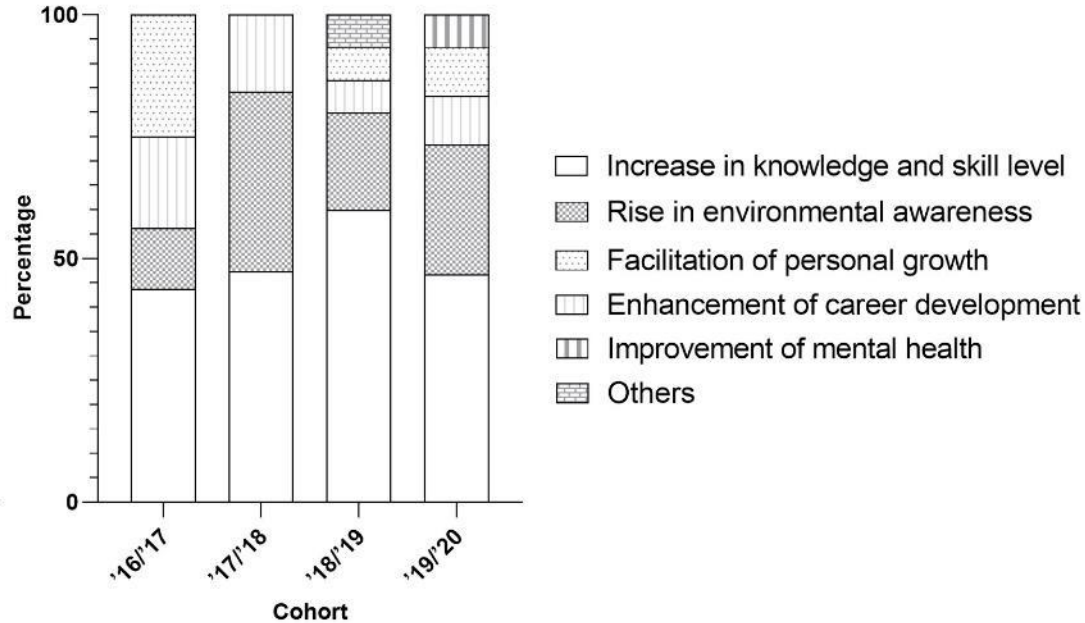
Effectiveness of the program

Frequency of the outcomes mentioned by the respondents of the program to the online questionnaire:



Effectiveness of the program

Corresponding percentage of outcomes mentioned by the respondents to the online questionnaire from the four different cohorts and their composition:



Planting a seed of experience - long term effects of a co-curricular ecogarden-based programme in higher education in Hong Kong

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