


Development of Fieldwork Skills
with Residential Field Study
Courses and Related
Arrangement



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[Presentation Outline]

- Concept of residential field courses
- Development of fieldwork skills from residential field study courses: Case of Field Studies Centres (FSC) in HK
- Related arrangements with special reference to the joint recruitment exercise of HK FSC

Concept of Residential Field Study Courses

- Established in 1943, the Field Studies Council has had positive and profound impact on the development of field studies works in Hong Kong. It is deeply-entrenched among the Council, that people will appreciate the nature and start to protect it, once they get to know deeper about the environment in which they live.
- The Sai Kung Field Studies Centre (SKFSC) was set up by Hong Kong Department of Education in 1978, after drawing inspirations from the daily operations and courses of the Field Studies Council.
- Ho Koon and CCHFSC set up in 1996 following SKFSC's model.

Development of Fieldwork Skills – Case of CFC (1)

Existing Topics (Topics offered in 2017-2018):

- Drifting Classroom
- Dynamic Earth: From Theory to Practice of Geoconservation
- Exploring Coastal Environment in Cheung Chau
- Island Weather
- Managing River and Stream Quality
- Physical Environment in Cheung Chau
- Sustainable Development
- Sustainable City Studies
- Traffic and Pedestrian Flow
- Woodland Ecosystem Discovery

<http://caritasfsc.edu.hk/en/downloads/>

Forthcoming Topics:

- Changing Industrial Location in Wong Chuk Hang (Topics offered in September 2018)
- Farming System in Mui Wo (Topics offered in September 2018)
- Opportunities and Risk (Topics offered in Jan 2019)

[Example of Residential Courses – Planning and Preparation]

Coast

- When? Where?
- Tidal level

Susdev

- When? Where?

[Example of Residential Courses – Data Collection]

■ **Coast**

Wind speed

Wind direction

Wave frequency

Longshore drift

Number of swash and
backwash

Sediment analysis

Beach profile

■ **Susdev**

Sustainable indicators:

Air (pm 2.5, pm 10)

Noise level

Water pollution parameters

Counting of pedestrian and
traffic flow

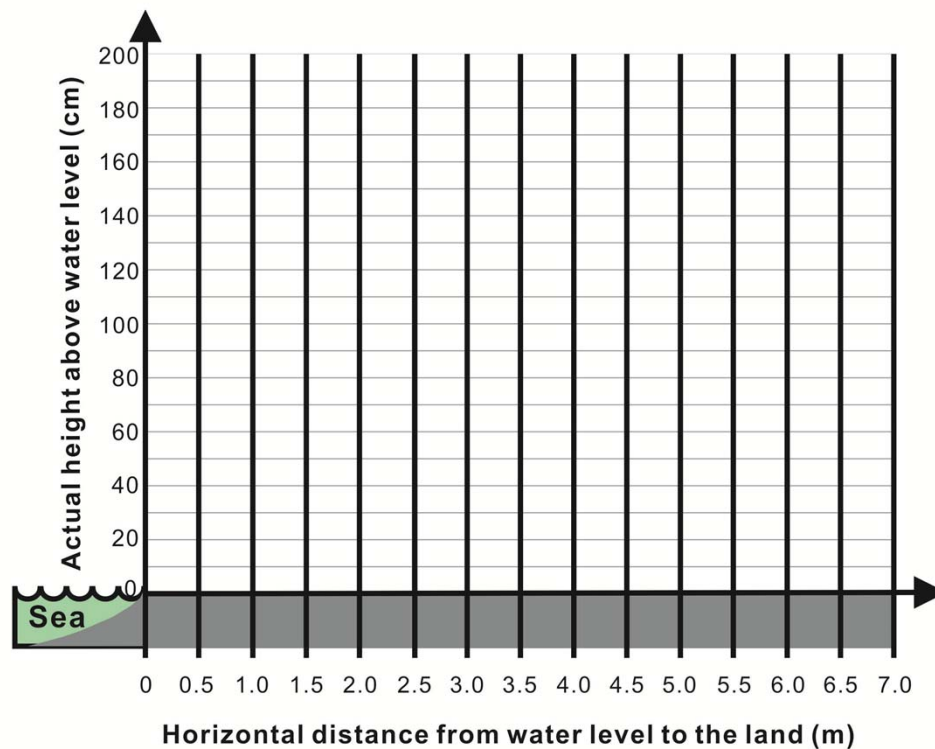
Land use mapping

Use of secondary data for
socio-economic info

Example of Residential Courses – Data Processing

■ Coast – Example of Beach Profile by Leveling

Downshore profile of _____ Beach (Transect _____)



Example of Residential Courses – Data Processing

■ Sudev – Example of Sustainable Indicators

Items 項目		Tung Wan 東灣	Public pier 公眾碼頭
Air quality 空氣質素	Wind direction 風向		
	Wind speed [max.] (m/s) 風速 [最高] (米/秒)		
	Respirable suspended particulates 可吸入懸浮粒子 (particles per cubic foot)		
Noise level [max.] (dB) 噪聲水平 [最高] (分貝)			
Flow rate 流量 (5 mins分鐘)	No. of pedestrian 行人數量		
	No. of bicycle 單車數量		
	No. of electric car 電動車數量		
	No. of village vehicle 鄉村貨車 數量		
Sea water quality 海水質素 (Physical factors 物理因素)	Water colour 水顏色 (Clear清澈 / Turbid渾濁 / Brown呈褐色 / Black呈黑色)		
	Smell 氣味 (None無味 / Some略臭 / Moderate頗臭 / Strong極臭)		
	Floating matter 飄浮物 (None無 / Some少量 / Plentiful中量 / Abundant大量)		
Laboratory work 實驗工作 (Chemical factors of Sea water 海水化學因素)	pH value 酸鹼度		
	Ammonia NH ₃ / NH ₄ ⁺ content (ppm) 氨濃度 (百萬分之一)		
	Phosphate PO ₄ ³⁻ content (ppm) 磷酸鹽濃度 (百萬分之一)		

[Example of Residential Courses – Data Interpretation]

- **Coast – Example of Beach Profile by Leveling**
- Compare and contrast the beach profile of Tung Wan Bay and Kwun Yum Wan.

- **Sudev – Example of Sustainable Indicators**
- Describe and explain the air quality of Tung Wan Bay and Kwun Yum Wan.

Example of Residential Courses – Evaluation

C1. Review the difficulties in data collection. Propose ways to improve the data accuracy in any one of the research item.

C2. Other than primary data, suggest other secondary data and information you might need to further investigate the degree of human impacts on the coast in Cheung Chau.

S1 What are the limitations of fieldwork today? Please give suggestions for improvement to these limitations.

S2 Pick one of the urban problems of Cheung Chau above. What information and data should be collected for further investigation?

Impacts of residential fieldwork – My

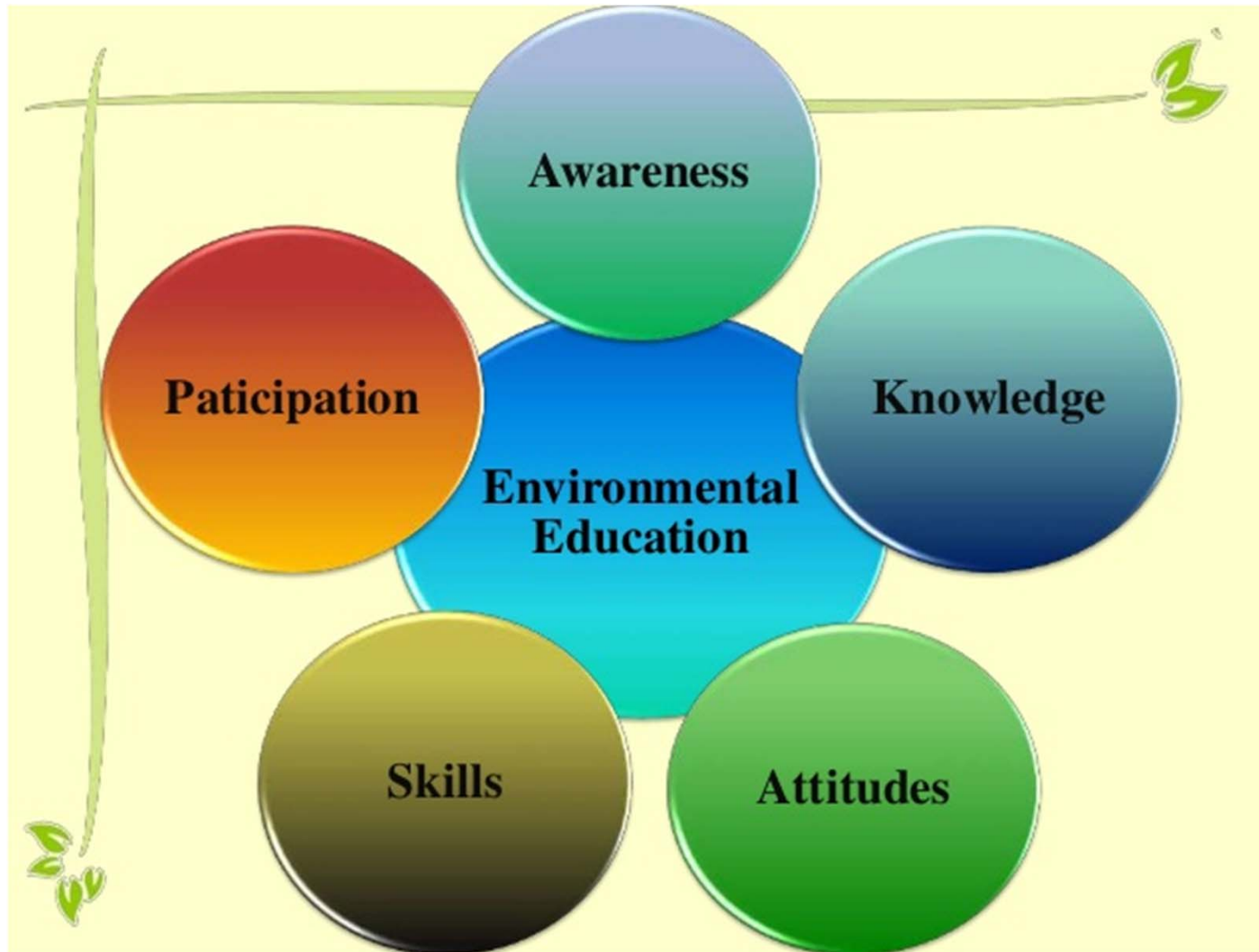
Perspective

- Ample time
- Sufficient time for students to reflect one day teaching materials covered
- More than one fieldwork conducted – spiral effect of learning
- The fieldwork skills can be transferred from one to another. It serves consolidation purpose.

Positive impacts of Residential Field Courses – Literature Review (1)

- Dresner and Gill (1994) found a summer camp programme had increased self-esteem, outdoor skills, environmental issue awareness, and enthusiasm for nature in children.
- Palmberg and Kuru (2000) found experiences in nature with environmental skills could develop students' self-confidence and feelings of safety, in particular, which in turn increased their willingness to participate in future outdoor activities as students' comfort zones have been expanded.
- Similar findings were found in the studies of Carlson and Baumgar (1974), Dunlap and Hefferman (1975), Ward (1976), Geisler et al. (1977), Ross and Driver (1978), Christy (1983), Sia et al. (1985), Kellert (1985), Shepard and Speelman (1986) and Dettmann-Easler and Pease (1999). Their studies revealed that most of the outdoor camp programmes were effective in enhancing environmental attitudes. Besides, Gilbertson (1991) compared residential EE programmes to other forms of EE programmes and found the residential field experience provided the greatest gain in students' environmental learning.

Positive impacts of Residential Field Courses Literature Review(2)



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