THE HONG KONG POLYTECHNIC UNIVERSITY
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專業進修學院
SPEED

Fostering Global Citizenship through Sustainable Development Goals (SDGs)

A 3-credit Curriculum in General Education for the Degree Sector

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PolyU SPEED

Objectives of SDG Curriculum

- Foster Global Citizenship through UN Agenda 2030 & its Sustainable Development Goals (SDGs)
- Identify targets and indicators of SDGs
- Identify SDG deliverables from developed and developing economies
- Develop intended learning outcomes of students in SDGs
- Quantify level of SDG achievements of students through assessments
- Impress on students being Global Citizens contributes to sustainability of planet earth

Strategy of SDG Curriculum

- Develop 3 x13-hour mini-modules for the 3-credit course
- Provide contents for each mini-module
- Choose SDGs which best fit the objective of fostering global citizenship
- Select relevant teaching pedagogy
- Use relevant assessment and learning methods, e.g., self-assessment; critical thinking
- Develop teaching materials based on UN Agenda 2030 and nations' response in the form of targets and indicators
- Impart to students significance of Global Citizenship in the context of the economic, environmental and societal components of UN Agenda 2030

Module 1
Why Foster Global Citizenship ?

Module 1

M1 Content

- M1.1 China's response to Agenda in form of pledges and meeting 169 targets
- By 2020, ensure all the rural population living under China's current poverty line, or over 50 million people, are lifted out of poverty, achieve poverty alleviation in all poor counties and solve the overall regional poverty issues.

- By 2025, reduce deaths from cardiovascular diseases by 15 percent, increase the five-year survival rate for cancer victims by 10 percent, and reduce the under-70 mortality from chronic respiratory diseases by 15 percent on the basis of that of 2015.
- By 2030, spread knowledge about psychological well-being and raise public awareness of mental illnesses such as depression and the importance of seeking medial advice. Improve prevention and treatment of common mental disorders.

M1.2 HK's Experience in Espousing the Economic, Environmental and Societal Components Embedded in SDG 4 (Quality Education)

1. Identifies precise development and distribution of the three key components of Economy, Society and Economy among students and schools. Findings are derived from activities and evidence when students submit their reports and present cases on ESD activities, and when schools submit their reports for assessment
2. Establishes the level of relevancy of ESD learning activities to school subjects and to the school curriculum. In identifying the precise development and distribution of Environment, Society and Economy, categories denoting the application of students' knowledge to ESD learning are constructed

- The four categories in Environment relate to policy-making, and environmental practices and measures such as energy saving, green school and recycling.
- Practices and measures accounting for 32% of total ESD learning activities stand out as a single group of activities which students choose as their focus in their work.
- The eight categories in Society relate to art, culture, current affairs, mental health, community work, and social interaction and development.
- Social and community interaction and development which account for 76% of all ESD learning activities stand out as the most significant feature.
- The four categories in Economy relate to learning experience in economic development and the application of other skills. The former accounting for 19% is far too low as learning experience is central to understanding and developing the Economy component.

- In addition to the above findings, it is found that the distribution of the three components of Environment (62%), Society (30%) and Economy (8%) is not balanced.
- This means that schools and students in their documentations and presentations have not adequately made use of knowledge and skills in the Economy component.
- The second finding relates to the relevancy level of ESD learning to school subjects and to the school curriculum. It reveals that ESD learning is relevant to 11 subjects.
- Of these subjects, Liberal Studies, Language, Physics, Geography, Computer Studies, Chemistry and Biology have scores in the 10%-19% range. Liberal Studies (19%) and Language (15%) are the two leading subjects relevant to ESD learning. History, Mathematics, Economics and Physical Education which have scores in the 2%-4% range are less relevant.

- As regards the relevancy of the three components of Environment, Society and Economy to school subjects, it is found that only 12% of ESD learning related to the Environment component is relevant to school subjects.
- Language, Physics, Chemistry, Biology, Mathematics, Geography and Liberal Studies have been made use of by students.
- Nevertheless, each of these seven subjects accounts for only 1% to 2% out of the total of 12%. It is surprising that Liberal Studies has not been given greater weight by students in the Environment component.

- As regards the relevancy of ESD learning to the school curriculum, the fact that only 14% of the former is relevant to the latter leaves a great deal of room for enhancement.
- The alignment of Liberal Studies, Social Science-oriented subjects and Life-Wide Learning with the ESD learning program should facilitate an increase from 14% to say, 25%.

- Hong Kong's experience in integrating ESD into the school curriculum as illustrated by findings will be greatly enhanced when schools and UNESCOHK alike emulate the experiences and good practices in other countries.
- In so doing, shortcomings will hopefully be reduced or eliminated.
- Maintaining a balanced development of the 3 key components of Environment, Society and Economy is a pre-requisite to good integration of ESD into the curriculum.
- In terms of enhancing students' ability to espouse ESD in the context of each of the three key components, lessons can be learned from South East Asian countries where the social studies curriculum is designed and developed for ESD.

Module 2
Fostering Global Citizenship through Climate Action and Water Management & Investment

M2 Content

M2.1 Climate Action and Climate Change & Planning Sustainable Development for the Environment

• UN Agenda 2030 on climate action and climate change attends to

1. climate change education
2. climate change and world heritage
3. social dimensions of climate change, and
4. addressing climate change.

- In (1) UNESCO responded to climate change through the Global Action Programme on Education for Sustainable Development. International seminars and Ministerial Declaration on Education and Awareness-raising have been held. An Experts Meeting on Climate Change Education for Sustainable Development was held in Latin America and the Caribbean.
- In (2), UNESCO prepared a report in 2014 on Predicting and Managing the Effects of Climate Change on World Heritage.
- In (3), UNESCO put first priority on the background, processes and social implications of migration.
- In (4), the UNESCO Climate Change Initiative aims to help Member States to mitigate and adapt to climate change, to educate for sustainable development in the context of climate change, to assess the risks of natural disasters and to monitor the effects of climate change on UNESCO sites.

M2.1.2

- The UN undertakes sustainable development planning in the Asia-Pacific via its Asia Pacific Group which comprises 53 countries through its institutions, namely, the United Nations Development Plan (UNDP), Economic and Social Commission Asia Pacific (ESCAP), and UN Environmental Protection (UNEP).
- One of the main campaign has been the “One Health (and Well-being) Movement” which aims to “free the human race from the tyranny of poverty and want, and to secure out planet”.

M 2.2

Pollution and Pollution Control & Sustainable Water Management and Investment

M 2.2.1

•WHO reports that 4 out of 5 city dwellers do not meet air quality guidelines; 98 % of under-developed countries and 56 % of high-income countries do not meet these same guidelines. 3,000 cities in 103 countries have air quality measuring that is associated with health impacts and risks such as stroke, heart diseases, and chronic and acute respiratory diseases.

•Other types of pollution refer to water, industry, food, commercial, noise and light. Pollution control actions and management include control of emissions and effluents in the air, water and soil. Specific actions are refuse dispersal systems and electro-plastic precipitation of gases and recycling.

M 2.2.2

•UN-Water facilitates and coordinates freshwater resources from surface and ground and the interface between freshwater and sea water. Water sanitation encompasses access and use. Attention is drawn by UN-Water to the global perspectives which indicate annual withdrawal of freshwater, excessive urbanization and climate change affecting water resources.

•UN-Water promotes investment in water jobs in respect of management of water resources, safe drinking water and sanitation, and the agricultural-food and the energy sectors.

Module 3
Fostering Global Citizenship through Low-Carbon Initiatives & Sustainable Development

M 3 Content

M 3.1 Sustainable Urban Tourism through Low-Carbon Initiatives: Hue and Chiang Mai

- Chiang Mai and Hue deploy strategies for low-carbon development and employment generation in the development of urban tourism. Chiang Mai's city impacts require it to address problems of greenhouse gas emissions by deploying modal shifts to cleaner travel through a well-planned tourism sector.
- Hue's city impacts require it to address impacts of climate change and flooding by implementing good urban development planning.
- For both cities, the strategies for low-carbon development and employment generation require participatory research and contextual action as well as public-private partnerships.

M3.2

Planning Cultural Tourism for Sustainable Economic Development

- Prioritising tourism for economic development in developing countries requires a driving force to attract investment from outside investors from developed countries, in addition to public or private sector investment. Mass tourism development for developing countries is an option as it generates foreign currency quickly, particularly by relying on international tourism operators.
- The World Tourism Organisation adopted the Global Code of Ethics for Tourism to encourage good practice sustainable relationships. Good management and strategic support facilitate the reduction in the balance of payment debts.
- As regards the agenda of poverty alleviation, tourism development for developing countries has a critical and direct role to play in the alleviation of poverty, as opposed to the developed world in which tourism enhances the quality of life.

Assessment Methods

Assessment Method for Module 1-3

Assessment Method	% Weighting	MILO to be Assessed			
		a	b	c	d
Group project and presentation	60%	√	√	√	√
Test	30%	√	√	√	√
Class Participation	10%	√			√
Student Study Effort Expected		Lectures			26 hrs
		Seminars / workshops			13 hrs
		Self-study			84 hrs
		Total effort			123 hrs

Learning and Teaching

- Learning and teaching are anchored on a holistic, diversified and flexible approach, attention being paid to learning outcomes and academic integration. Interactive lectures are supplemented by workshops and supported by e-learning.
- Experiential learning is the focus for students. Web-based learning and teaching provide supporting skills for students. In the entire process, new concepts and innovative ideas and views are imparted.

Conclusion

- Through the 39-hour 3-credit course, students are able to acquire knowledge on UN Agenda 2030 and SDGs
- Through the 3 modules, students are able to understand the significance of the environmental, societal and economic components in SDGs for the purpose of saving planet earth
- Becoming global citizens is achievable and this course provides the foundation