Research Assessment Exercise 2020 Impact Overview Statement

University: The Education University of Hong Kong

Unit of Assessment (UoA): 26 Geography

Total number of eligible staff of the university in the UoA: 6

(1) Context

i. The main non-academic user groups, beneficiaries or audiences for our research are geography teachers and students; policymakers in education; environment and urban development; country and national park managers and staff; hotel operators and staff; NGOs; travellers; tourists; the media; and the general public locally, in Mainland China, and internationally.

ii. The main types of impact relevant to the unit's research include impacts on a.) education; b.) public policy and services; c.) the environment; d.) human health (through better water treatment, and public awareness of health hazards); e.) quality of life and welfare; f.) the economy; and g.) society (eg through increased awareness and understanding of issues related to the environment and sustainability).

iii. How these relate to research activity in the unit: Research led by Chow and Cheng focused on use of e-learning and virtual reality in school and university geography education is achieving educational impact; Cheung and Chow's work on ecotourism and travel is achieving impact on public policy and services, the environment, the economy (through tourism development) and society through increased awareness of the need for sustainable behaviours; Fok and Cheung's work on microplastic pollution has impact on the environment; human health; society (through changed public perceptions) and the economy (eg fisheries); Hu's research has impact on urban development and mitigating climate change; and Pei's work on the links between climate change and human activity on war and revolution in pre-history has potential societal impact through increasing understanding of the consequences of climate change.

(2) Approach to impact

Our approach to impact in the period of review aims to fulfil the University's strategic aim of serving local and international communities with needs-focused scholarship, knowledge transfer and community service, and reflects its encouragement that academics engage in commissioned/contract projects, consultancies, professional development courses, local or international professional conferences, professional seminars and workshops, as well as participating in social, community and cultural events. It involves:

- 1. Ensuring the quality, rigour and relevance of our research, which underpins our reputation in the wider society. Research that aims to inform and shape urban and environmental management, public policy and public opinion goes hand in hand with our KT activities.
- 2. Building strong networks with other researchers; policymakers (Education Bureau and HK Examinations and Assessment Authority (HKEAA) in geography education, local governments for ecotourism); major donors eg EDB, Development Bureau; Agriculture, Fisheries and Conservation Dep. (AFCD) on country parks enhancement project; school leaders and teachers; local and international NGOs (such as UN World Tourism Organisation's Global Sustainable Tourism Council); hotels (eg YMCA group). We have done this by accepting invitations to participate in policy advisory committees (e.g. EDB and HKEAA committees on geography education and examinations); speaking on our research and its relevance to practice at policyled events (e.g. Annual Conference of the Global Sustainable Tourism Council); organising our own events for students, academics, policymakers, media and the general public (e.g. Hong

Kong Geography Day) and drawing on our links with schools afforded by the University's key role in teacher education and development.

- 3. We have won a number of tenders from the government departments that meets societal needs in public policy, sustainability and education, eg for Education Bureau, Development Bureau and AFCD.
- 4. We have sought out *cross-disciplinary and international and local collaboration* to strengthen our research and impact. For example, work on the use of e-learning and VR in geography is being extended to involve psychologists, and collaboration across eight local universities; work on plastic pollution involves working with chemists and biologists. The collaborative research projects could generate wider policy impacts for not only in geography discipline and for international organisations.
- 5. We maximise knowledge transfer and public engagement by participating in public events (e.g. Hong Kong Geography Day 2018; hosting the International Geography Olympiad in 2019; speaking at EDB training events; leading overseas/mainland study visits organised by EDB for secondary school teachers; and helping EDB on its smart city project and the Greater Bay Area project).
- 6. We have implemented a *coherent communications and media strategy* across multiple platforms by working with the University's Communications Office to publicise research findings through press conferences and press release and direct contacts with individual journalists, achieving extensive coverage in mainstream print and broadcast media; and maximising use of social media such as researchers' Twitter/Facebook accounts.
- 7. We monitor impact achieved, to inform future research and adjust KT activities. For example, the gathering of longitudinal data on changed teaching practices and student learning outcomes is included in the planning for geography education applied research.

This approach draws on University-wide resources, such as Academy of Hong Kong Studies (for survey work); Education for Sustainability Centre (for networks and funding); KT unit, Research and Development Office (for funding and KT award incentives); Communications Office (for media engagement, dissemination and monitoring); and the university's well-established local, national and international partnerships and networks.

(3) Strategy and plans

Our strategy and plans for achieving impact include conducting more professional development activities for geography teachers; communicating with EDB on equipment needs for schools to implement curriculum innovations; making use of equipment such as infrared cameras to measure actual impact of visitors on ecotourist sites; and continuing to host the annual Hong Kong Olympiad for Geography, and Hong Kong Geography Day. We will leverage on the reputation and community leadership roles of Jim, a member of government advisory bodies and NGOs, including Physical Sciences Panel of the Research Grants Council (RGC), to raise the profile and reputation of EdUHK's expertise in geography and contributions to the education sector and wider community.

(4) Relationship to case studies

Impact achieved from Cheung's research in Wolong National Nature Reserve was an outcome of his experience and reputation in ecotourism research and strong networks with the Government of the HKSAR, the travel sector, and universities in Hong Kong and China (Sichuan University and Sichuan Agricultural University). Knowledge Transfer has been extended through devising accreditation systems for eco-tourism businesses and guides, and his activities as a trainer for guides in Wolong and for the Global Sustainable Tourism Council. Extensive media coverage for the project contributed to changing public perceptions. Impact is being monitored and reviewed with follow-up studies after 2, 5 and 10 years. In achieving this impact, he has worked closely with the university's KT Unit and Communications Office.