

The key purpose of the project is to help ESSC students getting sufficient preparation for field study with supplementary e-learning materials by:

- (A) further polishing the current e-learning materials and transform them into interactive on-line courses; and
- (B) incorporating part of the current e-learning materials into Virtual Reality (VR) for students to obtain practical experience and knowledge for geological field study.

All the products are managed in ESSC website: <https://cuhkesscelearn.wixsite.com/home/video-resource> and they enhance student's learning in and preparation for field study in ESSC courses (ESSC2010, ESSC3100 and ESSC2120), including:

(I) 21 polished supplementary videos about Hong Kong and Taiwan geology:

- a. 7 polished supplementary field-study videos for Tung Ping Chau,
- b. 7 videos for Bluff Head and
- c. 7 videos for Taiwan

(II) 2 online VR360 (Kang Lau Shek and Cham King Chau)

(III) 2 aerial videos (Cham King Chau and Lung Lok Shui)

(IV) 2 VR Tour 360 Android mobile Apps (Viewing with VR device)

(V) 2 KEEP courses (Tung Ping Chau and Bluff Head)

(VI) 1 Selection Quiz for ESSC2120 enrolment

The results of the quiz and feedback from the participants reveal that the project is considered to be helpful and very helpful to enhance students' field study. They also raise student's interest in geology and motivate them to self-learn new knowledge and practice geological techniques. Moreover, it is believed that our products cover some topics in other departments such as GRM, and hence hoping to enhance more interactive and interdisciplinary learning among faculties. To a wider extent, the materials could be interactive activity for general public and introduced in Open Day/Information Day, school visits and scientific public talks. The application of advance technique in the production provides a new insight in teaching traditional geology. The satisfactory feedbacks for the project marks the first collaboration between ESSC and ELITE a prominent step for future education projects.