Examples for School Reference - Geography Series

Example (1): Using web-based VR 360° panoramic photographs and online maps for conducting virtual urban field study

Introduction:

Fieldwork is one of the core elements of geography. By capturing the field environment with digital videos or photographs, and uploading them onto websites, virtual field trips allow students to experience the field environment, observe and identify geographical features, phenomena and patterns, and collect and interpret data in front of computer screens. Although virtual field trips cannot be treated as a "substitute" to real fieldwork, they permit the possibility of experiencing a wider range of field environments, including those distant and remote places that are inaccessible to students.

Virtual field trips with virtual reality (VR) technology, such as using 360° panoramic photographs in this example, can immerse students in places of the real world or an imagined world. With such web-based immersive field study, students can continue to conduct virtual fieldwork even in periods of class suspension (including the suspension of real fieldwork). These virtual field trips can also be treated as supplementary training opportunities to real fieldwork to enhance the development of fieldwork skills of students after class resumption. In this Example (1), web-based VR 360° photographs and online maps are used for conducting virtual urban field study in Central and Sheung Wan (see Appendix 1). They can help students to learn various fieldwork and map reading skills effectively.