

Project Title : Blended Learning for Building Student-Teachers' Capacity to Learn and Teach Science-related Interdisciplinary Subjects

Leading Institution : The Education University of Hong Kong

Participating Institution(s) : The Chinese University of Hong Kong, The University of Hong Kong

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The proposed project will develop a new set of foundation science modules that will be shared among three institutions: EdUHK, CUHK and HKU. The modules will equip student teachers who lack foundational knowledge in science with the knowledge that they need to possess to fully benefit from existing science-related courses in the teacher education programmes of these institutions. The project addresses the problems that the three institutions have encountered when training non-science students to be teachers of science-related interdisciplinary school subjects. These science modules will add basic scientific knowledge to the existing science-related teacher education courses that equip student teachers with the content and pedagogical knowledge they need to teach science-related subjects in primary or secondary schools. These school subjects include Primary General Studies (GS), Junior Secondary Integrated Science (IS) and Senior Secondary Liberal Studies (LS). These modules will be designed for integration into existing courses in a flexible way to meet the requirements of individual courses. The pedagogical design of these modules will be based on a blended learning mode that combines the advantages of e-learning and face-to-face contact. The e-learning or online-learning components will be delivered through a Learning Management System (LMS) such as Moodle. This learning environment allows for self-pacing under the guidance of the course tutor.

Students can work toward different goals by building on their own background knowledge. This project, the first of its kind, will involve inter-institutional collaboration in designing, piloting and evaluating the modules delivered through blended learning to meet the common needs of the education faculties. It will contribute to the capacity of science education faculties to design and implement creative and innovative curriculum designs and pedagogy to address curriculum and learning issues in teacher education.