

The main objective of this project “Micro-teaching”: The application of flipped learning to invert the sports science classroom with smartphone and tablet devices”, was to provide students with an advanced learning aide to more efficiently develop a deeper understanding of the theoretical and practical educational materials which form a central element to their learning. This was achieved by implementing various modules for their use, which were designed based on the specific input of the teachers concerned.

In-depth research was conducted in relation to the newly available e-learning resources from both within and outside CUHK to implement with a view to enhancing the students’ experience of learning. A large amount of the materials generated in this project were sourced from both governmental and earmarked non-governmental organisations.

Using hands-on activities and online tutorials, smart technology was used to develop micro-modules as an effective teaching tool to assist the understanding of the basic principles involved at the research, organisational, officiating and administrative levels of sport and physical education (PE). A number of key pedagogical goals were developed with a view to augmenting the understanding of research methodologies and enhancing professional practice and preparation for pre-service teachers in training. Furthermore, these micro-modules helped to develop a deeper understanding of the theoretical and practical educational materials which form a central element to students’ learning.

Primarily, this was achieved by creating relevant “user interfaces” for students, which were built using cutting-edge technology, incorporating graphics and animation which will be fully compatible with mobile and tablet devices for ease of access and to optimise participation and understanding. These micro-modules were designed for maximum usage across numerous courses at departmental and faculty level. In total, approximately 120-130 students will benefit from the use of these micro-modules over a period of 5 – 7 years.

Specifically, these micro-modules took the form of video tutorials and custom made “apps” designed to enhance the level of learning and student participation at various different developmental stages in the classroom setting.

Various methods of evaluation methods have taken place and are still ongoing. Student surveys and focus-group interviews measured the impact and outcomes of the eLearning upgrade. The projects’ impact was examined to assess the extent to which the project carries forward innovative, cutting edge developments in teaching and learning; and the breadth and sustainability of the project’s impact on teaching and learning activities. It is hoped that the feedback collected can benefit the next stage of development and further enhance the quality of teaching and learning within our department and across our faculty.