THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Scheme 1: Basic Scheme

Interim Report (2017-18)

Report due 31 October 2017. Please return by email to mmcd@cuhk.edu.hk

PART I

Project title: Learning Comes Alive Principal supervisor: Dr. John O'Reilly

Department / Unit: Sports Science and Physical Education

Project duration: 12 months Date report submitted: 23rd April 2018

1. Project objectives

Is the project on track to meet its objectives?

The project began in May 2017 and was estimated to be completed around 1st May 2018. The project was designed to create 6 micro-modules to deliver to Sport & Exercise Science students to improve their learning experience and enhanced their in-classroom engagement. So far, 3 micro-modules have already been completed and delivered to students, whilst the remaining modules are still on-going.

Have the objectives been changed as a result of the experience of working on your MMCDG project?

The objectives of the ongoing project remain the same as the initial proposal. The use of VR and other e-learning techniques are to be implemented further into the curriculum of Sport Science students to develop their understanding of the relevant topics within their coursework. The use of these innovative instructional methods, whilst continuing to use traditional teaching methods, will allow students to gain knowledge from wider sources of information, whilst also immersing them into a deeper learning experience throughout the classroom activity.

2. Progress on process, outcomes or deliverables

What have been accomplished so far?

Three Micro-modules have been successfully delivered to students so far (# 1, 4 & 5). The main initiative of this projected has been accomplished as students now have access to a wider range of learning experiences to stimulate their learning by using non-traditional methods.

Have any obstacles been encountered and what are the remaining tasks to be finished?

There have been no significant issues or problems that have been encountered during the implementation of the micro-modules. The only notable obstacle that has affected this project is to complete the project before the grant expiry date. Due to complexity of designing Virtual Reality simulations and interactive videos, the project is expected to be delayed until the end of July 201.

Is the project still on time for completion (which includes preparation of the final report) on or before the grant expiry date?

The project will be delayed until end of July 2018, and the project will seek the necessary extension to complete the remaining micro-modules.

Provide a listing of project outputs to date.

Micro-modules #1, 4 & 5 have been completed:

- #1. Video tutorial: Basic anatomy and physiology of the cardiovascular system.
- #4. Video tutorial: Anatomy and physiology of the respiratory system.
- #5. Virtual Reality: Respiratory and cardiovascular responses to exercise.

3. Evaluation Plan

Have you altered your evaluation plans?

The evaluation plan for this project remains the same as the initial proposal. To evaluate the effectiveness of the project, both teachers and students will be asked to give feedback on their opinion of the new system. Surveys and small focus group interviews will allow us to obtain reliable feedback that can indicate what was successful and which specific areas require some improvement. The use of surveys will allow teachers/students to direct feedback towards the questions asked about the new system, and the use of small group discussions will allow teachers/students to verbally express their feedback with one another to see how individuals coped with the new system, and what they think could be improved/changed about it.

Currently the project has achieved its primary objective, even though thorough feedback has not yet been obtained from teachers/students. However, since the delivery of the 3 micromodules, we have allowed students to engage in learning through new methods of e-learning and virtual reality. This enables the students to be more interactive and enthusiastic towards the curriculum, by taking them away from the traditional teaching methods of lecture slides and taking notes. Technology is evolving faster than most industries globally, so it is important for the education industry to keep up-to-date with the new technology as it can be used to enhance learning with positive effect.

4. Dissemination Activities (reports, websites, video links, products, etc.)

Provide a listing of dissemination activities to date.

Some examples of the type of materials used can be seen from the video clips below.

https://www.youtube.com/watch?v=iMieUanq418

https://www.youtube.com/watch?v=NZ14XjOQoFY

https://www.youtube.com/watch?v=_lgd03h3te8

https://www.youtube.com/watch?v=ESFPSHCDDZU

https://www.youtube.com/watch?v= qmNCJxpsr0

Following the completion of the implementation and evaluation phases of the project, a number of key deliverable outcomes are planned. This will include, but is not limited to, a manuscript for submission to a high-impact educational journal, and a presentation of the findings and conclusion at an academic conference which would allow us to share our experience with this project, and hopefully encourage other education institutions to follow.