

THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Scheme 2: Studies in Foundation Courses

Interim Report (2017-18)

Report due 31 May 2018.

Please return by email to mmcd@cuhk.edu.hk

PART I

Project title: Meeting safety needs through virtual reality apps

Principal supervisor: Prof. Cho Lee Wong

Department / Unit: The Nethersole School of Nursing

Project duration: From December 2017 to October 2018

Date report submitted: 31 May 2018

1. Project objectives

This project aims to develop a micro-module that cover two major topics in a first-year nursing course, “Fundamentals of Nursing I”. The objectives of this project are (1) maximize students’ learning by allowing them to learn in their own pace with the use of micro-modules; (2) support flipped classroom implementation in the course; and (3) engage students in an active learning environment. The two topics are “Meeting safety needs” and “Ensuring a safe and comfortable environment for care”. These two topics are chosen because they contained a mixture of knowledge and concepts which are more appropriate to learn by engagement in problem-solving scenarios and interactive activities. The project is on track to meet its objectives.

The project objectives have not been changed.

2. Progress on process, outcomes or deliverables

The storyboard for the two interactive animated cartoon scenarios and contents of the App have been developed. It is planned that they will be ready by October 2018.

The major obstacles were time constraint and we underestimated the time to produce the animations and the App, such that the production of these were delayed and could not be used in this academic year. To solve this problem, we used the lecture notes in PowerPoint format and role play during the lecture to replace the content of the animated scenarios. Anyway, we have confident that the project will be on time for completion on or before the grant expiry date.

There are four components in the 2 micro-modules:

- (1) Identify intrinsic factors for fall
 - A storyboard and draft animation has been developed.
- (2) Conduct fall risk assessment
 - A storyboard and draft animation has been developed to guide students step-by-step in conducting the “Morse Fall Scale” for a patient.
- (3) Identify extrinsic factors for fall in home setting
 - The content and storyboard for the virtual home environment demonstrating various extrinsic factors for fall.
- (4) Identify extrinsic factors of fall for patients and various risks that threatened health care

providers' health in hospital setting

- The content and storyboard for a virtual hospital environment demonstrating various risks for patients and health care providers.

3. Evaluation Plan

As the production of the animations and App are still in progress, the evaluation plan is operated based on the produced storyboard. The storyboard for conduct fall risk assessment and identify extrinsic factors of fall for patients and various risk that threatened health care providers' health in hospital setting have been introduced to the class. As this course will continue to be run in next academic year, these components will be evaluated in next year.

- Students' perception and satisfaction toward the micro-module as well as flipped classroom teaching will be evaluated by quantitative and qualitative survey. Quantitative survey has been designed and delivered to students after completion of the course.
- Qualitative data are collected by focus group interviews. Participants will be deliberately asked to reflect on their general perception about the developed micro-modules, and to make suggestions for change. Focus group interviews will be conducted in June.

Preliminary data analysis has been conducted on survey data. In general, students found that the micro-modules enhanced their understanding on designated topics and helped them to learn at their own pace. Overall, they were satisfied with the implementation of flipped classroom.

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

We will continue to share our experiences in flipped classroom implementation in local, regional, and international conferences.

The micro-modules produced in this project will be used in Year 1 course of other post-graduate programme titled NURS 6202 Fundamentals of Nursing II.

As flipped classroom will be continued to implement, the results of the current project help to motivate teachers to produce micro-modules to facilitate flipped classroom implementation in other nursing courses.