#### THE CHINESE UNIVERSITY OF HONG KONG

# **Micro-Module Courseware Development Grant**

**Scheme 1: Basic Scheme** 

## **Interim Report (2017-18)**

Report due 31 May 2018. Please return by email to mmcd@cuhk.edu.hk

### PART I

Project title: A Step-Forward for Blending Learning: Mobile Micro-Module Flipped Classroom Courseware in Clinical Year Studies

# Principal supervisors:

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## Department / Unit:

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Project duration: From December 2017 to October 2018

Date report submitted: 31 May 2018

### 1. Project objectives

This project aims to train the application of textbook knowledge into clinical practice. The outcome is helpful in reinforcing the commitment to professional principles while they transit to their new roles as student physicians on health care teams during clinical clerkships. No objectives have been changed.

# 2. Progress on process, outcomes or deliverables

The mobile application called, mPACS (mobile Pass A+ in Clinical Studies) includes six topics listed as follows.

- Clinical significance of anatomy and physiology in the abdominal cavity
- Liver cirrhosis with portal hypertension
- Ascites
- End-stage renal failure with a kidney transplant
- Polycystic kidney disease
- Organomegaly due to haematological diseases

Our team has designed the content and begun the constructed the learning platform. The progress of the project will be still within the timeline even though the construction of the material of eLearning platform has been revised several times. After finalising, mPACE, it will be launched to the testing platform for a trial run at the end of Aug.

This project involved multi-disciplinary effort from the Clinical Skill Learning Centre, Information Technology Service Center, Medical Information Technology, and Office of Medical Education. Additional manpower in the production of animations, audio recording, and integration of content in coordination with mobile usage design was recruited. Tight supervision and monitoring was given during the whole process.

#### 3. Evaluation Plan

Evaluation phase has not yet commenced. In early September, the evaluation will be conducted to assess attitudes, learning and teaching experience among students. The methodologies will be adopted as follows:

#### a. An anonymous questionnaire

The e-survey will be conducted among students to evaluate the perceived utility and effectiveness of mPACS after the lectures. The potential domain of questions for

student questionnaire is listed below:

#### - Perceived utility of teaching courseware

- o How often do you use the interactive mPACS?
- o Does mPACS motivates your self-learning?
- o Is mPACS user-friendly and that you can find the structures easily?
- o Can mPACS be facilitated your peer interaction during clinical practical?

# - Perceived effectiveness of teaching courseware

- o Is the interactive mPACS helpful in understanding the clinical significance related to the structures and functions in the abdominal cavity?
- o Do the contents of interactive mPACS facilitate your enrichment in clerkship training?
- O Do the formative assessment stimulate your self-reflection for the professional competence?
- Do the content facilitate your cognitive connections in the differential diagnosis process?
- o Does the content give you the clear concept in the clinical skills training?
- o Does the mPACS enhance your learning outcome?
- o Is the information given on the topics in mPACS also applicable to your professional development, especially to the clinical examination?

# **b.** Focus Group with Students

Two focus-groups with four students each will be held to receive learning experience in the adoption of the courseware. The study findings should be helpful to inform the further micro-modules development and strategic planning in blending learning scheme at the Faculty and University level.

The empirical data will be analysed and reported descriptively in aggregate. After data analysis, we will evaluate the usefulness of the courseware of mPACS and submit a report for the discussion of the future development of the blended learning in bridging course of the clerkship training.

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

Our team would like to have a pilot study to use the diagnosis of chronic liver disease for demonstration the components of how critical thinking can be processed, for example, spot out the problem from the patient, collect the facts from physical examination and make the differential diagnosis from the subtraction of the probabilities. The courseware will be disseminated to the junior clerkships in the coming academic years. We have made the video for the interim report in the following link:

https://gocuhk-my.sharepoint.com/:v:/r/personal/florencetang\_cuhk\_edu\_hk/Documents/mPA CS%20Project.mp4?csf=1&e=cm0hm7