

THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Scheme 1: Basic Scheme

Interim Report (2015-16)

Report due 30 June 2016.

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

PART I

*Project Title: A New Concept for the Micro-modules in Flipped Classroom of the Medical Education:
Clinical Skill e-Learning Channel*

Principal supervisor: *Dr. Florence Tang*

Department / Unit: *School of Biomedical Sciences, Faculty of Medicine*

Project duration: *From January 2016 to December 2016*

Date report submitted: *29 June 2016*

1. Project objectives

The primary aim of the project is to develop new innovative teaching courseware, facilitating students' learning of clinical skills during the bridging course of the Faculty of Medicine curriculum. Our students should gain confidence and expertise in applying their knowledge as part of their ongoing professional training in clinical medicine. More importantly, the micro-modules can motivate students' cognitive engagement through blended learning.

2. Progress on process, outcomes or deliverables

The prototype of eC Skills Channel was introduced in the course of MEDU3520 Clinical Anatomy and Clinical Skills, a short summer course for Medical Year 3 students in the bridging the gap from pre-clinical to clinical translation. The content has been made available on a temporary server at http://137.189.27.142/ec_skills_channel.

After six months from the project initiation on December, the project team has successfully completed the micro-modules on the topic hernias in the groin. In the following months, we will continue to work on the second topic of rectal examination on the follows items:

- Overview of perianal diseases

- Clinical anatomy of the rectum and anal canal
- Procedures for the rectal examination
- Surgical procedures of the haemorrhoidectomy

3. Evaluation Plan

An anonymous, self-administrated survey was conducted among Medical students. The aim of the survey is to examine student's attitudes towards perceived towards the content of our newly developed platform. In the survey, students were asked the agreement to the statements on the following scales:

“1” = he/she thought the always or almost always true of him/her;

“2” = he/she thought it frequently true of him/her;

“3” = he/she thought it is true to him/her about half the time;

“4” = he/she thought it is sometimes true of him/her;

“5” = he/she thought it is never or only rarely true of him/her; and

“NA”= Non-applicable

According to the data of the feedback, students agreed that the eC Skills Channel comprises the comprehensive knowledge on hernias in this elearning courseware. Table 1 shows perceived usefulness of the courseware among students.

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

HTML5 was adopted to develop the responsive courseware website, animations and MPEG 4 for video streaming, which supports wide accessibility on *any* device, including smartphone and tablet devices.

In addition, the courseware was also launched in the CU server for the Medical students to access the micro-modules in the eC Skills Channel. After making announcement via mass email and BlackBoard Learn, students can perform their personal on-line self-study in the platform. In our project, students can access the resource of the illustrations with explanation, animations and videos

5. Conclusion

We taped a video for the introduction of our new concept eC Skill Channel and launched in the link as follows:

http://137.189.27.142/ec_skills_channel/ec_skills_channel2.rar.

Overall, this project is running on time as anticipated. The interim evaluation indicated that students perceive the benefits of using the software in complementary with clinical learning. The development of the courseware is promising take a leading role, promoting mobile learning for learners to acquire information at their own pace.

Table 1 Questionnaire statements and feedback are summarized.

Questions	Likert scale					NA
	1	2	3	4	5	
I would like to have an e-learning courseware about clinical skills in the bridging course.	62%	31%	7%			
There is a urge to have the e-learning courseware in the topic of “Hernia in the groin Region”						
The learning material in the download PDF version is useful.	28%	48%	24%			
The contents of the hernia in the groin listed below are good for my self-reflection study:	45%	48%	7%			
-Overview of the hernia in the groin region	52%	48%				
-Embryogenesis of descent of the testes	24%	76%				
-Clinical anatomy of inguinal canal	55%	45%				
-Types of hernia	59%	41%				
-Indirect hernia (for the hard-copies only)	62%	38%				✓
-Direct hernia (for the hard-copies only)	56%	44%				✓
-Femoral (for the hard-copies only)	62%	38%				✓
-Deep ring control test (for the hard-copies only)	50%	50%				✓
-Physical examination of hernia (for the hard-copies only)	69%	31%				✓
-Surgical procedures of hernia (for the hard-copies only)	19%	63%	18%			✓
-The self-study revision quizzes (for the hard-copies only)	44%	38%	19%			✓
Do you like the content of videotaping which you have watched? (for the hard-copies only)	44%	50%	6%			✓