

THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Scheme 1: Basic Scheme

Final Report (2017-18)

Report due 31 October 2018

Please return by email to The Ad hoc Committee on Planning of eLearning Infrastructure
mmcd@cuhk.edu.hk

PART I

Project title: **Visualisation of human diseases with micro-modules for real time classroom teaching (Phase 1)**

Principal supervisor: **Dr Isabel HWANG**

Co-supervisor(s):

Department / Unit: Division of Education, School of Biomedical Sciences

Project duration: From December 2017 to October 2018

Date report submitted: 18 Nov 2018

1. Project objectives

This project is on track to meet its objectives. The key objectives indicated in the application proposal have not been changed as a result of the experience of working on the MMCDG project. However, we merged the four micro-modules into two to facilitate viewing for the student users. We also removed one type of disease from the micro-module due to course revision requested by the student representatives and programme committees.

2. Process, outcomes or deliverables

Two micro-modules have been produced and they will be used in a biomedical science course (year 2) for both blended and classroom teaching in September 2019. The same micro-modules will also be selectively used in medicine year 2 (MEDU2400) as supplementary (after-class) materials by the medical course teacher.

MM	Title	Download link Website: http://137.189.27.142/isabel/heart	Online contact time
1	Atrial and ventricular arrhythmia	http://137.189.27.142/isabel/heart/mm1/story_html5.html	~ 6-8 minutes
2	Stridor and its causes	http://137.189.27.142/isabel/heart/mm2/story_html5.html	~ 8-10 minutes

Overall, the project was completed just on time and satisfactorily.

3. Evaluation Plan

We were not able to conduct a pilot test to the micro-modules as they have just been completed by end of October.

4. Dissemination, diffusion and impact

Please provide examples of dissemination: website, presentations in workshops or conferences, or publications.

Please provide examples of diffusion: how the project results/process/outcomes/deliverables have been used in your unit and other parts of CUHK or other institutions?

Please provide examples of impact: how the project results (micro modules) can be adapted to other disciplines.

The micro-modules have just been completed and they will be launched shortly to medical year 5 students.

PART II

Financial data

Funds available:

Funds awarded from MMCDG \$ 52,700 _____

Funds secured from other sources \$ _____

(please specify _____)

Total: \$ 52,700 _____

Expenditure: HK\$52,700 (please refer to the summary sheet generated by the Finance office)

Item	Budget as per application	Expenditure	Balance
Total:			

PART III

Lessons learnt from the project

Please describe your way forward.

- *We aim to expand the existing projects with more disease conditions for both live class teaching and blended learning. However, we firstly need to evaluate the response of the students first.*

Please describe any of the following item(s) accordingly:

Key success factors

- *We salute the technical team led by Mr Ray Lee for helping us to complete this project. They have offered many important inputs about how to make the micro-modules more user friendly. E.g. we combined some micro-micro-modules to facilitate student viewing and to simplify differentiation of heart diseases.*

Difficulties encountered and remedial actions taken

- *ITSC has taken up many MMCDG projects and Mr Ray Lee is one of the principal contact person who accepted all the jobs. However, during the project development, it was realized that his unit has become the bottleneck as he had to complete various projects at the same timeframe. Although quality of the project has not been compromised, stress levels for all team members were consistently high as we are all competing to complete the project deadline when manpower in ITSC does not seem to keep up with the number of projects they have taken up.*
- *As the course was newly created, some of the subjects that were previously covered had to be removed due to student feedback and such changes have been endorsed by the programme committee. This affects the actual contents to be delivered on the micro-modules and a lot of extra time was spent to revise all the source materials prepared earlier which was very unsatisfactory and frustrating. This put on a lot of pressure to the project leader.*

Suggestions to CUHK

- *Please give us more time to complete the project. The project duration from Dec 2017 to Oct 2018 is too tight.*
- *The early reimbursement date before the project completion date is not ideal and it prevents us from using up all the grants to e.g. employ student helpers. When the final project is launched, there is always some final hiccups that require assistance from student helpers. E.g. to narrate slides with some typos. We could not do that as the reimbursement date is set too early.*
- *While we continuously praise the elearning committee for providing us such a precious grant opportunity to facilitate our elearning development in CUHK, teachers from our School cannot translate the time spent on developing micro-modules as part of the teaching load (unlike some department in the university such as the English learning department). Thus, it is very difficult for us to complete the project within such a short timeframe when our teaching load remains the same.*
- *The University has already made it clear that there is an e-policy to promote blended*

learning and flipped classroom but sadly at School level, there isn't much additional resources we could obtain to further advance and revise our e-learning developments with time. Most of the senior management (esp the professorial staff) do not really care (and they don't even know the difference between blended learning and flipped classroom) about creating a more friendly or encouraging environment for teachers who are dedicated to find extra time to enhance e-learning development. While we are competing with time to produce various kinds of e-learning materials, the often feedback is we have the duty to report our impact of e-learning to those who never bothered about us in the first place. Our years of hard work are just some statistics they need to complete their executive report. This effectively lowers the morale of me and some other teachers I personally know through collaboration. It is a frustrating feeling but somehow teachers who benefited from the MMCDG are still motivated and inspired mainly due to the positive response and appreciation expressed by their students. I do not think that the university level can find a better way to reach different departments and schools about promoting e-learning but I just hope that we are given more room to experiment with different e-learning developments in a less friendly environment.

PART IV

Information for public access

Our project produced two micro-modules in English and a course website for the Year 2 biomedical students. These modules will be used for both blended learning and live class teaching in a course called Physiology and Pathophysiology. The micro-modules developed here focus cardiac diseases such as cardiac arrhythmia and cardiac failure. The contents delivered are suitable for students who would like to obtain a general understanding about the different types of cardiac problems aided with animated videos and audio narrations.

1. Keywords

Please provide five keywords (in the order of most relevant to your project to least relevant) to describe your micro-modules/pedagogies adopted.

(Most relevant) Keyword 1: arrhythmia
 Keyword 2: cardiac failure
 Keyword 3: fibrillation
 Keyword 4: cardiac problem
(Least relevant) Keyword 5: ejection fraction

2. Summary

Please provide information, if any, in the following tables, and provide the details in Part I.

Table 1: Publicly accessible online resources (if any)

(a) Project website:

If a publicly accessible project website has been constructed, please provide the URL.

(b) Webpage(s):

If information of your project is summarized in a webpage (say a page in the department's or faculty's website), please provide the URL(s) here.

(c) Tools / Services:

If you have used any tools or services for the project, please provide names of the tools or services in here.

Storyline, Photoshop, illustrator, premiere, 3rd studio max, audition

(d) Pedagogical Uses:

If any flipped classroom activities have been conducted, please provide information in here. If relevant, please indicate how your project output can be used to support flipped classroom activities.

(c) Others (please specify):

Table 2: Resources accessible to a target group of students (if any)

If resources (e.g. software) have been developed for a target group of students (e.g. in a course, in a department) to gain access through specific platforms (e.g. Blackboard, facebook), please specify.

<u>Course Code/ Target Students</u>	<u>Term & Year of offering</u>	<u>Approximate No. of students</u>	<u>Platform</u>
<i>SBMS2103/ Year 2 biomedical students</i>	<i>Term I, 2019</i>	<i>~35</i>	<i>Blackboard</i>
<i>MEDU2400/year 2 medical students</i>	<i>Term I, 2019</i>	<i>~250</i>	<i>Blackboard</i>

Table 3: Presentation (if any)

Please classify each of the (oral/poster) presentations into one and only one of the following categories

	Number
(a) In workshop/retreat within your unit (e.g. department, faculty)	<i>Please insert no</i>
(b) In workshop/retreat organized for CUHK teachers (e.g. CLEAR workshop, workshop organized by other CUHK units)	<i>Please insert no</i>
(c) In CUHK ExPo jointly organized by CLEAR and ITSC	<i>Please insert no</i>
(d) In any other event held in HK (e.g. UGC symposium, talks)	<i>Please insert no</i>

delivered to units of other institutions)	
(e) In international conference	<i>Please insert no</i>
(f) Others (please specify)	<i>Please insert no</i>

Table 4: Publication (if any)	
<i>Please classify each piece of publication into one and only one of the following categories</i>	Number
(a) Project CD/DVD	<i>Please insert no</i>
(b) Project leaflet	<i>Please insert no</i>
(c) Project booklet	<i>Please insert no</i>
(d) A section/chapter in a booklet/ book distributed to a limited group of audience	<i>Please insert no</i>
(e) Conference proceeding	<i>Please insert no</i>
(f) A chapter in a book accessible internationally	<i>Please insert no</i>
(g) A paper in a referred journal	<i>Please insert no</i>
(h) Others (please specify)	<i>Please insert no</i>

3. A one-page brief write up

Our young students have all grown up in a digital age and we believe that custom-made short videos that shows the visual process aided by animation could help to improve both understanding and the application of concepts to disease conditions. In this project, we focused on developing animated micro-modules describing a number of cardiac diseases such as cardiac arrhythmia and cardiac failure.

Two micro-modules were produced. The usefulness of these micro-modules will be tested by preview and review by our students to determine whether expansion of the present project will be necessary in future. This project facilitates blended and flipped learning as well as live class teaching.

Project ID : 3210825
 Responsible Cost Centre : SBS
 Responsible Person : HWANG Shui Shan Isabel
 Finance Office Contact Person : Karen/Carmen Lam
 Start date : 18.12.17 End date : 31.08.18

THE CHINESE UNIVERSITY OF HONG KONG
 INCOME AND EXPENDITURE STATEMENT
 FROM 01.07.18 TO 30.11.18

Date 08.11.18 Page 1
 Time 14:55:50 ZJIE0300 / Q3584S

Visualisation of Human Diseases with Micro-Modules for Real Time Classroom
 Teaching (Phase 1)

Balance at b/f	Year-to-date				Total	Accumulated Balance	Overall Budget	Available Budget Balance
	Actual payment	Commitment	Outstanding PR					

SELECTION OPTIONS
 =====

Project definition :

WBS Element :
 EQUAL 3210825 INCLUSIVE

Level :
 BETWEEN 1 AND 99 INCLUSIVE

Incl. Hierarchy : Yes

Current data

Fiscal year 2019

Period 05

Frozen image

Fiscal year

Period

Budget year

Budget version

Summary No

Cost element group ZJIVC2.TDG

Subtotal at level 2

WBS element status selection: Active and blocked

Blocked date :
 BETWEEN 01.01.1900 AND 31.12.9999 INCLUSIVE

*** Please note that the 'Suppress' flag must be set to 'X' in all 'INCOME' levels of the cost element group specified.
 Otherwise, unexpected result will occur.

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	Year-to-date				Total	Accumulated Balance	Overall Budget	Available Budget Balance
	Balance at b/f	Actual payment	Commitment	Outstanding PR				
Expenditure								
Printing,Stationary & Supplies	0.00	180.20	0.00	0.00	180.20	180.20	4,500.00	4,319.80
Service Charges	0.00	48,557.10	0.00	0.00	48,557.10	48,557.10	47,100.00	(1,457.10)
Vehicle & Travelling Expenses	0.00	62.50	0.00	0.00	62.50	62.50	0.00	(62.50)
Other Expenses	0.00	3,638.25	0.00	0.00	3,638.25	3,638.25	1,100.00	(2,538.25)
	0.00	52,438.05	0.00	0.00	52,438.05	52,438.05	52,700.00	261.95
Total Expenditure	0.00	52,438.05	0.00	0.00	52,438.05	52,438.05	52,700.00	261.95
TOTAL FUND BALANCES	0.00	(52,438.05)	0.00	0.00	(52,438.05)	(52,438.05)	(52,700.00)	

The commitment includes the staff cost commitment for three years or up to the employment contract end date. The budget holder is responsible to solicit funds from other sources to cover any deficit of the project, taking into account any approved budget to be released to the project in future years.