THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Final Report (December 2015)

Report due 31 December 2015.
Please return by email to The Ad hoc Committee on Planning of eLearning Infrastructure
mmcd@cuhk.edu.hk

PART I

Project title: e-Learning of reading and presentation skills

Principal supervisor: Prof. Au Wing Ngor Shannon

Co-supervisor(s): Prof. Shaw Pang Chui, Mr. Leung Chi Fai Kenneth

Department / Unit: School of Life Sciences

Project duration: From January 2015 to Dec 2015

Date report submitted: 31 Dec 2015

1. Project objectives

Is the project on track to meet its objectives?

- Yes, the project is on track and has met the proposed aims.

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

- No, only the sequence of micro-modules MM1 and MM2 are swapped as we considered this re-arrangement fit the course outline.

2. Process, outcomes or deliverables

Please specify the number of micro modules produced, and the course(s) that have used the micro modules in Part IV, and provide more detailed descriptions in here.

- We have produced 5 micro-modules, all are included under Module 6: Self-study Skills in LE@RN BIOCHEM e-learning platform. They have been used in BCHE3090 Self-study Module in Biochemistry (Term 1, 2015-16). Specifically, we introduced the project web page and the objectives of using micro-modules to complement the course work in our first lecture. Students were asked to go through each micro-module according to the course schedule. Small group discussion on paper reading was included in class as a trial for flipped classroom. A web link to the e-learning platform was also set in Blackboard for convenient access.

Have the nature of the deliverables been changed?

- No. Each micro-module contains all key elements as proposed.

Have you adjusted your timeline?

- Yes, request for project extension was made as we encountered some obstacles when running the project.

Overall, was the project completed satisfactorily?

- Yes. We encountered some obstacles at the early and later stages of the project that initial plan to apply Camtasia for screen casting cannot be made. There was also a delay for the completion of MM4-5 that release of these materials was slightly behind the course schedule.

3. Evaluation Plan

Have you altered your evaluation plans?

- No.

What monitoring data did you collect?

- From the content usage statistic in Blackboard, a total of 2,402 hits to the project website were recorded during the first semester. Over 50% of class has visited the site for more than 10 times.

Does your evaluation indicate that you have achieved your objectives?

- Although the content usage statistics are encouraging and suggest that students may find the micro-modules helpful. Yet, collection of their feedback for each micro-modules is in progress. At present, we invited our current and senior students who have taken BCHE3090 to complete a questionnaire via Google Form. Feedback collected during Teachers-students Consultation Meeting held in Term 2 will be compiled together. Student's engagement in learning critical reading and presentation skills, and peer assessment will be included. We will report to the MMCD Committee when the evaluation results are available.

4. Dissemination, diffusion and impact

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

- A website for public access is available.
  http://www.bch.cuhk.edu.hk/learnbiochem/module6.html
- Since there is a delay in project completion, we will present our project in ExPo 2016

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

- At present, the project is used in BCHE3090 (for Year 3 students major in Biochemistry). Once we collect all the feedbacks and fine-tune the micro-modules, we will offer them to senior project students and postgraduates that would provide recaps for them when preparing oral presentation and dissertation.

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

- We consider the five micro-modules are also helpful for non-Biochemistry major students in School of Life Sciences and School of Biomedical Sciences.

PART II

Financial data

Funds available:

Funds awarded from MMCDG	$	94,000
Funds secured from other sources (please specify_____)	$	-
Total:	$	94,000

Expenditure:

Item	Budget as per application	Expenditure	Balance
Service charges by ITSC	$10,000	$3,300	$7,000
Purchase of softwares, Audio/video equipments, computer	$30,000	$32,688	($2,688)
One part-time project assistant and 3-4 student helpers	$53,500	$29,022	$28,048
Miscellaneous items (stationery, CD)	$500	$930	($430)
Total: (as at 31 Dec 2015)	$94,000	$65,940	$28,060

PART III

Lessons learnt from the project

Please describe your way forward.

- We will fine tune the five micro-modules once the evaluation results are available. Preliminary feedback from senior students commented the content of the micro-modules is too long for reading. To enhance the effectiveness of the micro-modules, we will apply Camtasia screen casting to make a few videos, especially for MM1, MM2 and MM5.

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

- *Key success factors, if any*
  - Funding and technical support from CUHK.
  - 50% of the materials are ready before we started the project.
- *Difficulties encountered and remedial actions taken, if any*
  - Time constraint is one of the major obstacles we encountered; there was a delay to complete all five micro-modules before term start. Still, we released the project link for student access so that the materials can be applied in line with the course outline. Additionally, we recruited extra student helpers to assist the project work.

- *The role of other units in providing support, if any*
  - *ITSC provided valuable technical advices and support to the project. We greatly appreciate it.*
- *Suggestions to CUHK, if any*
  - *Nil*

PART IV
Information for public access

Summary information and brief write-ups of individual projects will be uploaded to a publicly accessible CUHK MMCDG website. Please extract from Part I the relevant information to facilitate the compilation of the publicly accessible website and reports.

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: Critical reading

Keyword 2: Oral presentation

Keyword 3: Scientific writing

Keyword 4: Information search

(Least relevant) Keyword 5:

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:** *http://www.bch.cuhk.edu.hk/learnbiochem/module6.html*
(b) **Webpage(s):** *Nil*
(c) **Others (please specify):** N/A

Table 2: Resource accessible to a target group of students (if any)
If resources (eg. software) have been developed for a target group of students (eg. in a course, in a department) to gain access through specific platforms (eg. Blackboard,

facebook), please specify.

Course Code/ Target Students	**Term & Year of offering**	**Approximate No. of students**	**Platform**
BCHE3090	*1st term 2015*	*53*	*Blackboard*

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 (eg. department, faculty)	-
(b) In workshop/retreat organized for CUHK teachers (eg. CLEAR workshop, workshop organized by other CUHK units)	-
(c) In CUHK ExPo jointly organized by CLEAR and ITSC	- *(Since there is a delay in project completion, we will present our project in ExPo 2016)*
(d) In any other event held in HK (eg. UGC symposium, talks delivered to units of other institutions)	-
(e) In international conference	-
(f) Others (please specify)	-

Table 4: Publication (if any)	
Please classify each piece of publications into one and only one of the following categories	**Number**
(a) Project CD/DVD	-
(b) Project leaflet	-
(c) Project booklet	-
(d) A section/chapter in a booklet/ book distributed to a limited group of audience	-
(e) Conference proceeding	-
(f) A chapter in a book accessible internationally	-
(g) A paper in an referred journal	-
(h) Others (please specify)	-

3. A one-page brief write up

Please provide a one-page brief write-up of no more than 500 words or a short video (~2 minutes) (preferred).

We have created five micro-modules for self-study skills in reading and presentation (*http://www.bch.cuhk.edu.hk/learnbiochem/module6.html*). Each micro-modules will take about 20-30 minutes for viewing and exercises. A brief description for each micro-modules is listed below.

Micro-module 1: Information search skills for life science students

This part introduces the use of Google Scholar and PubMed in information search, and databases for life sciences. Different formats of citation in publications and reference management with RefWorks (which can be accessed through our library) are included. Self-exercise for students to practice their understanding and applications of these resources are also designed.

Micro-module 2: Elements of a scientific paper

This part describes different types of scientific papers and their structures. A self-test exercise is created to help students to understand different types of research papers.

Micro-module 3: Reading and understanding a scientific paper

This part describes the basic steps for an effective reading of scientific papers. Students will also be guided through a list of questions when making critical comments. A self-test exercise for students to practice their skills in critical thinking is included.

Micro-module 4: Elements of scientific writing

This part provides general guidelines to prepare different sections of a scientific paper. Students will also be guided through three scientific papers to grab the language skills in making arguments and highlighting key findings.

Micro-module 5: Elements of effective presentation

This part provides key steps to prepare and deliver a scientific presentation. Three videos given by senior students are included to demonstrate the presentation skills. A self-test for students to practice their understanding is also included.

For the above five micro-modules, the content are mainly established by using Microsoft Word while formatting of self-test exercise was assisted by ITSC staff. At present, the micro-modules have been used in BCHE3090 in the first term of 2015-16 and the following flipped classroom activities were conducted.

Activity 1 (MM 2 & 3): Small group discussion on effective reading and paper reviewing.

Activity 2 (MM 4): Workshop on writing a scientific paper and use of language.

Activity 3 (MM 1-5): Small group presentation on a research paper. This aimed to test the student engagement in learning throughout all micro-modules. Peer assessment was also implemented.