

THE CHINESE UNIVERSITY OF HONG KONG
Micro-Module Courseware Development Grant

Scheme 1: Basic Scheme

Final Report (2017-18)

PART I

Project title: Interactive Micro-Modules for Gerontology Students

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Department / Unit: The Nethersole School of Nursing

Project duration: From January 2018 to January 2019

Date report submitted: 11 Jan 2019

1. Project objectives

In this project, we aimed to develop 4 micro-modules for the topics in the Basic Care in Gerontology course offered to Year 1 students in the BSc in Gerontology, of which is a special 2-year-articulated Programme for sub-degree graduates. The micro-modules is expected to equip gerontology students with foundational knowledge and essential skills to address the basic care needs of older-adults.

Overall, the project was on track to meet its objectives and have not been changed.

2. Process, outcomes or deliverables

In total, 4 micro-modules have been developed and used in Flipped Classroom Teaching in the course BSCG3112 Basic Care in Gerontology between September - Dec 2018. Each micro-module lasted for approximately 20 minutes and contained tailored made video/animations on course contents, followed by some questions for self-evaluation. The total duration time were 80 mins.

Micro-module 1 – Basic principles of Human Anatomy and Physiology

Duration	: 20 mins
Style	: S2 PPT + Voiceover

Micro-module 2 – Essential Human Physiology: Understanding Blood pressure

Duration : 20 mins
Style : S2 PPT + Voiceover

Micro-module 3 – Physical changes in the aging process

Duration : 20 mins
Style : S2 PPT + Voiceover
: S12 Animation/ S5 Powtoon videos

Micro-module 4 – Mobility care

Duration : 20 mins
Style : S2 PPT + Voiceover
: S8 Demonstration (Medical)

The nature of deliverables have been minimally amended during the development process. Overall, the project is satisfactory conducted.

3. Evaluation Plan

Only part of the evaluations was conducted as the due date of this report submission. The following strategies have been used to evaluate students' experience in using micro-modules:

Online tracking system

All students enrolled in the course accessed and completed all the activities in the Micro-modules.

(Class size=29)	MicroModule 1	MicroModule 2	MicroModule 3	MicroModule 4
Completion rate	N=29 (100%)	N=29 (100%)	N=29 (100%)	N=29 (100%)

Survey

Student surveys (n=26) were collected at the end of the course. In general, the majority participants agreed that the Micro-modules 1) adequately explains the knowledge, skills and concepts it presents and 2) help students to gain a clear understanding of the subject respectively. The results indicates the objectives set were achieved.

Individual Interview

As the course just ended, individual interviews (n=8) will be arranged in term 2 to elaborate on the usefulness and possible improvements.

4. Dissemination, diffusion and impact

Dissemination	<p><u>Web Access:</u></p> <ul style="list-style-type: none"> ▪ The micro-modules were uploaded to Blackboard one week before the class commenced. The students could download these modules through the BSCG3112 “Basic Care in Gerontology” course platform under the “Course Content” category. ▪ Course website: <i>https://blackboard.cuhk.edu.hk/ultra/courses/_102470_1/cl/outline</i>
	<p><u>Presentations:</u></p> <ul style="list-style-type: none"> ▪ The project is accepted for a poster presentation in the CUHK Teaching and Learning Innovation Expo 2018 (Dec 2018).

As the framework of the MicroModules is well-established in this project, direct adoption to other courses would be feasible by the undergraduate and postgraduate courses, as well as other health-related disciplines such as Chinese medicine, Pharmacy and Public health.

PART II

Financial data

Funds available:

Funds awarded from MMCDG	\$ 76,800
Funds secured from other sources	\$ 0
(please specify _____)	
Total:	\$ 76,800

Expenditure:

Item	Budget as per application	Expenditure	Balance
Computer Software & Maintenance	15,900.00	16,063.75	(163.75)
Teaching & Research Expenses	1,150.00	1,250.00	(100.00)
Service Charges	10,000.00	4,909.39	5,090.61
Other Expenses	49,750.00	14,076.56	35,673.44
Total:		36,299.70	40,500.30

PART III

Lessons learnt from the project

The current project has developed 4 micro-modules for the topics in the Basic Care in Gerontology course (BSCG3112) to gain a better understanding of these fundamental concepts hence enhanced their ability to provide mobility care for older-adults. The majority of favorable responses from preliminary evaluation suggested that the constructed micro-modules were useful and adequately explained the knowledge, skills and concepts. Students also preferred this approach and enjoyed browsing the micro-modules. Similar approach may be further extended to other related courses so as to facilitate the self-paced learning.

PART IV

Information for public access

1. Keywords

(Most relevant) Keyword 1: Micro-Module

Keyword 2: Gerontology

Keyword 3: eLearning

Keyword 4: Older people

(Least relevant) Keyword 5: Mobility

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: <i>N/A</i>
(b) Webpage(s): <i>N/A</i>
(c) Tools / Services: <i>Articulate 360 (Education)</i> <i>Camtasia®</i>
(d) Pedagogical Uses: Students were asked to go through the micro-modules before class. During class time, teachers revisited the important concepts in the micro-modules and encouraged active learning through in-class 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>
BSCG3112	1st term 2018/2019	29	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 (e.g. department, faculty)	0
(b) In workshop/retreat organized for CUHK teachers (e.g. CLEAR workshop, workshop organized by other CUHK units)	0
(c) In CUHK ExPo jointly organized by CLEAR and ITSC	1
(d) In any other event held in HK (e.g. UGC symposium, talks delivered to units of other institutions)	0
(e) In international conference	0
(f) Others (please specify)	0

Table 4: Publication (if any)

Please classify each piece of publication into one and only one of the following categories

	Number
(a) Project CD/DVD	0
(b) Project leaflet	0
(c) Project booklet	0
A section/chapter in a booklet/ book distributed to a limited group of audience	0
(e) Conference proceeding	0
(f) A chapter in a book accessible internationally	0
(g) A paper in a referred journal	0
(h) Others (please specify)	0

3. A one-page brief write up

With the support from the 17-18 Micro-Module Courseware Development Grant, our team have developed 4 micro-modules for the topics in the Basic Care in Gerontology course (BSCG3112) with several objectives: (1) to enhance students' understanding of the human body system; (2) to apply the knowledge learnt in micro-modules into basic care practice; and (3) to support the flipped-classroom implementation.

Four topics were selected for developing the micro-modules: "Basic principles of Human Anatomy"; "Essential Human Physiology: Understanding Blood pressure"; "Physical changes in the aging process" and "Mobility care". It was believed that the developed micro-modules would help students to gain a better understanding of the fundamental concepts hence enhanced their ability to provide care for older-adults

The production of the micro-modules were plan and executed by team members, of who have acquired relevant trainings from the instructional designer at ELITE. Student helpers and assistants were also recruited to help in project development and evaluation. The total expenditures of this project is \$36,299.70 HKD including the costs on computer software & maintenance; personnel for teaching & research; and miscellaneous service charges.

The production of the micro-modules adopted the Articulate Storyline 360 software in the combination of: (1) annotated contents; (2) tailored made video/ animations, and (3) Questions for self-evaluation. To complement with flipped-classroom, students have been asked to go through the micro-modules before class. During class time, teachers revisited the important concepts in the micro-modules and encouraged active learning through in-class activities.

The experience in using micro-modules were only partially evaluated using survey and online tracking at the time of this report was written. The results showed that micro-modules have the pedagogical potential to facilitate student pre-class learning and support the implementation of flipped classrooms. The micro-modules will be kept in the Blackboard Learn platform in the coming academic years for students' access. Also, it is anticipated that the micro-modules will be made available in 2019-2020 academic year to students enrolled in the same course.

Our team would like to thank once again the Micro-Module Courseware Development Committee for approving the grant. The success of these micro-modules will not happen without their generous support.