

THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Scheme 1: Basic Scheme

Final Report (2016-17)

Report due 30 April 2018

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

PART I

Project title: Enhancing Learning of Language Disorders

Principal supervisor: Patrick Wong

Co-supervisor(s)

Department / Unit: Linguistics and Modern Languages

Project duration: From May 2017 to April 2018

Date report submitted: 17 April 2018

1. Project objectives

The project aims at producing 6 micro-modules for enhancing the learning of Language Disorders by students in the Dept of Linguistics and Modern Languages. We aimed to produce 6 micro-modules; 7 have been produced. The objectives have not been changed. We exceeded our target.

2. Process, outcomes or deliverables

Seven micro-modules addressing basic concepts of language disorders have been produced. They include short videos and accompanied questions. These are the modules that have been produced.

Micro-Module #	Description	Type	Description
1	Anatomy & Physiology of Face	Basic	<u>Video:</u> Bones and muscle groups of the face will be introduced. How muscles of the face control the production of specific speech sounds will be discussed. <u>Questions:</u> Identification of structures and matching speech

			sounds with face muscles
2	Anatomy & Physiology of Mouth	Basic	<u>Video:</u> Muscle groups of the mouth will be introduced. How muscles of the mouth control the production of specific speech sounds will be discussed. <u>Questions:</u> Identification of structures and matching speech sounds with mouth muscles
3	Overview of Nervous System	Basic	<u>Video:</u> Major divisions of the nervous system. Functions of lobes. <u>Questions:</u> Identification of structures and matching lobes with functions
4a & 4b	Etiologies of Brain Disorders (two modules were produced)	Basic	<u>Video:</u> Cerebrovascular system, types of cerebral vascular accidents, and other etiologies. <u>Questions:</u> Discuss consequences of different types of brain injuries
5	Autism Spectrum Disorders (Narrative)	Applied	<u>Video:</u> ASD patient A describes the Picture Scene from the ADOS-2 test, which is a direct assessment of ASD <u>Questions:</u> Transcribe 2 minutes of the narrative and identify grammatical and semantic features of ASD speech.
6	Autism Spectrum Disorders (Gestures)	Applied	<u>Video:</u> ASD patient B retell a sequence of events using gestures <u>Questions:</u> Observe and describe the gestures produced by this patient.

3. Evaluation Plan

Modules 1-4 (a&b) were used in the Language Disorders course in Term 2 of the 2017-18 academic year. Because of timing, the last two modules were not incorporated into this course. These modules were used in three different ways: a) Traditional flipped classroom where students viewed the video at home and conduct an assignment in class, b) A modified flipped classroom where the students viewed the lecture and conduct an assignment at home; in class, a more condensed version of the same lecture was given while additional, more in-depth information was presented; c) A video lecture was pre-viewed at home and the same lecture is repeated in class.

As this is my first time using these micro-modules, I would like to know how three different methods of using these micro-modules would affect learning.

At the end of the course, the students were given a questionnaire specifically related to these micro-modules. These are the observations from the questionnaire:

1. The students appreciated having the videos and almost all of them viewed the videos as required (we also have log-in data to confirm this).
2. The students thought that the biggest advantage of these micro-modules was the learning pace. They appreciated the ability to pause the videos and re-watch them. So this ultimately enhanced their learning.
3. For a minority of students, especially those who performed well, they reported not feeling a difference between using micro-modules and traditional lectures. Thus, it seems like the newer methods made more impact to the students who would have been weaker.
4. A weakness of the new method was time, as the students felt that they need to spend extra time on this course.
5. The videos were of variable length and the students preferred shorter videos.

4. Dissemination, diffusion and impact

These micro-modules will be used in my Language Disorders course in the future. The powerpoint slides that I use in the videos contain copyrighted materials from the publisher. Thus, per our agreement with the publisher of the book, only students who are registered to take the course at CUHK can use the micro-modules. In addition, our agreement with the two patients whom we filmed only allows us to show the videos to students who are registered for the course. Thus, the micro-modules will not be available to the general public.

PART II

Financial data

Funds available:

Funds awarded from MMCDG	\$	<u>81,034</u>
Funds secured from other sources (please specify _____)	\$	<u>0</u>
Total:	\$	<u>81,034</u>

Expenditure:

Item	Budget as per application	Expenditure	Balance
Video recording and editing services	78,934	78,930	4
Patient compensation	2,100	0	2,100
Total:	81,034	78,930	2,104

PART III

Lessons learnt from the project

Based on the feedback from the students, I will definitely continue to use these materials for my course moving forward. There did not seem to be a preference in how the videos are used (see the three methods stated above) from the students' perspective. From my perspective, I think the best way to use these videos is to allow me to expand on some more the materials that they students watch at home, thus allowing for deeper learning. I will explore that in the future.

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: Flipped classroom

Keyword 2: Blending learning

Keyword 3: Online learning

Keyword 4: Videos

(Least relevant) Keyword 5: Home assessment

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>ECHO 360</i>
(d) Pedagogical Uses: <i>The materials developed have been used and will continue to be used for flipped classroom.</i>
(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>
LING 5608	2 nd term annually	50	Blackboard
LING 3208	2 nd term every 2 years	40	Blackboard

Table 3: Presentation (if any)

<i>Please classify each of the (oral/poster) presentations into one and only one of the following categories</i>	Number
(a) In workshop/retreat within your unit (e.g. department, faculty)	N/A
(b) In workshop/retreat organized for CUHK teachers (e.g. CLEAR workshop, workshop organized by other CUHK units)	N/A
(c) In CUHK ExPo jointly organized by CLEAR and ITSC	N/A
(d) In any other event held in HK (e.g. UGC symposium, talks delivered to units of other institutions)	N/A
(e) In international conference	N/A
(f) Others (please specify)	N/A

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

3. A one-page brief write up

Please provide a one-page brief write-up of no more than 500 words and a short video.

In this project, I produced seven micro-modules for learning basic and applied concepts in language disorders. Each of these micro-modules consisted of a short video accompanied by a set of discussion questions and/or multiple-choice questions. Two types of micro-modules were produced which were most likely to be valuable for this course. The first type addressed a series of basic biological (“hard science”) concepts that are often unfamiliar to our linguistics students, including topics such as anatomy and physiology of the head and neck structures and etiologies of neurological disorders. The second type focused on patients with actual language disorders. Although video examples of language disorders are plentiful on youtube, they display individuals who speak English. Furthermore, distinctive features of the disorders are not highlighted to assist learning. The second type of modules we produced consisted of patients who spoke Chinese with accompanied learning materials. Some of these micro-modules were used in my Language Disorders course in Term 2 of the 2017-18 academic year. A survey was used to solicit feedback from the students who generally felt that the micro-modules facilitated learning, although they felt that additional time was devoted to these micro-modules that they would not have otherwise needed.