THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Final Report (October 2018)

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: Flipped Classroom Teaching –Religion and Ethics

Principal supervisor: Dr. CHOW Wai Yin

Department / Unit: Department of Cultural and Religious Studies

Amount granted: HK\$ 97,000

Project duration: From January 2018 to August 2018

Date report submitted: 31 October 2018

1. Project Objectives

The objective of this project is to produce 6 micro-module teaching videos (around 7 mins each) used as a part of Flipped Classroom in the course "CURE 2142 Religion and Ethics." This objective has been achieved and used in the course to facilitate students to understand 3 major moral dilemmas that human beings are facing today. The moral dilemmas include (1) Life and Death - How do we talk about Teen Suicide? (2) Work Ethics – Work for Money or Developing Talents? and (3) Environmental Ethics – Consumption and Environmental Sustainability.

2. Progress on process, Outcomes or Deliverables

With the researcher's academic and technical support, the production process was smooth and the project was completed satisfactorily. 6 mutli-media micro-modules were accomplished and delivered between January and August 2018.

3. Evaluation Plan

The evaluation plan is basically operated according to the proposal set:

a. The effectiveness of flipped classroom was evaluated by the **short quizzes** embedded in the micro-modules and *in-class discussions*. The quiz scores tracked on the

Blackboard showed that students' participation rate was high, their quiz results were satisfactory. It is therefore assumed that students could well understand the concepts presented in the micro-modules and the objectives set for each for micro-modules were achieved.

b. Students' perceptions on the effectiveness of Flipped-Classroom Teaching was evaluated by quantitative and qualitative surveys. The survey was conducted on 30 April 2018. The results are shown in the next session.

4. Dissemination, diffusion and impact

6 micro-modules were output as mp4, and uploaded as SCORM package onto the Blackboard through the course platform CURE 2142 "Religion and Ethics" on Blackboard (under the category "Course Content") for students to download.

At the completion of the semester, students were asked to complete a 6-question survey about their experiences in flipped classroom. A 4-point Likert scale ranging from "disagree" (1) to "strongly agree" (4) was used to capture students' perceptions on the learning effectiveness of flipped classroom. Three open-ended questions asked students to comment on the model.

4.1 Effectiveness of the Micro-Modules

35 students completed the course and 23 valid questionnaires were received which made up an overall response rate of 66%. All the questionnaires were collected via the paper-based administration. The means and percentage distributions of students' ratings on each of the items regarding the experiences in flipped classroom are shown in Table 1.

Table 1. Students ratings on effectiveness of the MMCD

			Percentage Distribution (%)			
		1	2	3	4	
Items	Mean	Disagree	Neither	Agree	Strongly	
			agree nor		Agree	
			Disagree			
1. The flipped classroom makes it easier	3.26	0%	4%	65%	30%	
to understand the course content.	3.20	0%	4%	03%	30%	
2. The Flipped classroom approach has						
helped me learn more than I would have	3.26	0%	4%	65%	30%	
if we had used in-class lecture and	3.20	U%	4%	05%	30%	
discussion methods only.						

3. The flipped classroom is beneficial in preparing for class.	3.21	4%	0%	65%	30%
4. The in-video quiz has helped me to understand the course content.	3.17	4%	0%	70%	26%
5. It is helpful to learn the basic course content at home, and do discussions with classmates and the teacher in class.	3.26	4%	0%	61%	35%
6. It is helpful to use flipped classroom to study "Religion and Ethics".	3.22	0%	9%	61%	30%

91% to 96% of the students gave ratings between 3 to 4 (i.e., between 'agree' and 'strongly agree') to the above measured items indicated that students generally agreed that the micromodules were effective in helping them understand the course content. Students' perception of flipped-classroom approach is analyzed as follows:

A. Perceptions of the Video Micro-Modules

To promote active learning and move progressively, we briefly told students what they need to know at the beginning at each micro-module. During the micro-module teaching, we used visual cues to highlight key points and synchronized animations with narration. 95% of the students agreed or strongly agreed that "The flipped classroom makes it easier to understand the course content" (item 1). About 95% of students experienced that "the flipped classroom is beneficial in preparing for class" (item 3). Also, 95% of students gave feedback that "the flipped-classroom approach has helped (them) learn more than I would have if we had used inclass lecture and discussion methods only" (item 2).

B. Perceptions of the MMCD Quizzes

Interactive short quizzes embedded into the micro-modules aimed at consolidating students' learning of new concepts. Immediate feedback was provided to the student after he/she had answered the question. If an incorrect answer was provided, students were allowed to attempt a question repeatedly until they answered it correctly. One of the advantages of interactive quizzes was to allow students to identify errors in understanding of basic concepts so that students could apply the right concepts for the discussion of ethical issues in the class time. By item 4, 96% agreed / strongly agreed that "the in-video quiz has helped (them) to understand the course content" (item 4).

In addition, the in-video quizzes have some impact on students' learning behavior. Students' average time spent (tracked by Blackboard system) on the micro-modules with and without quizzes was respectively 15.07 and 10.51. A possible explanation for this difference was that students reviewed the teaching content again after they had given incorrect answers. As such, students might have spent more time to grasp the concepts before they could start interactive discussion in class. Hence, about 95% of students experienced that "the flipped classroom is beneficial in preparing for class" (item 3), and 96% of students agreed that the

flipped-classroom approach was "helpful to learn the basic course content at home, and do discussions with classmates and the teacher in class" (item 5). 95% of students gave feedback that "the flipped-classroom approach has helped (them) learn more than I would have if we had used in-class lecture and discussion methods only" (item 2).

C. Flipped Classroom Improves Students' Learning in Ethical Issues

To analyze an ethical issue which requires the application of ethical concepts and principles relevant to it. In our flipped-learning setting, teaching time was spent mostly for delivering a deeper understanding of the concepts, which prompted a critical analysis of an ethical issue in the lecture class. Table 1 shows that 91% of the respondent agreed (mean=3.22) that "It is helpful to use flipped classroom to study "Religion and Ethics" (item 6).

4.2 Academic Outcomes of Flipped Classroom Learning

Further, we explored the flipped classroom on students' application concepts acquired out of class. As short quizzes embedded into the micro-modules allowed unlimited attempts in order to facilitate students to grip the new concepts, the scores of quizzes were not used to measure students' academic progress. Rather, we expected the students could apply the learned concepts in their reflection paper. We thus examined the relationship between the time spent in the video-lectures and their reflection paper scores.

Two variables were measured: total time spent on the micro-modules and the scores of reflection paper. Quiz Scores were moderately correlated with students' reflection paper scores (r= .49*, p= .001, n= 33). It can be said that students' positive engagement in flipped classroom could improve their academic achievement.

Suggestions

In this study, student responses to the flipped-classroom approach to "Religion and Ethics" is largely positive, indicating that this is an approach worth pursuing in future years. Future studies can be explored how flipped classroom enhances students' critical thinking and analytical skills in ethical issue discussions.

On the other hand, it is important to consider the academic time needed to produce a micro-module. Teaching evaluations and service requirements place significant pressure on many academics to ensure that the time is used as efficiently as possible. Micro-module production that requires a significant time may burden on academics. So, it is important to choose the topics that the students can be benefit from the opportunity of flipped classroom to apply concepts.

PART II Financial Data

Funds available:

Funds awarded from MMCDG	\$ 97,000
Funds secured from other sources	\$ 0
(please specify)	

Total:

\$ 97,000

Expenditure:

Item	Budget as per	Expenditure	Balance
	application		
Senior Staff (Teaching relief)	48,000	1	0
Subordinate Staff (Research Assistant)	48,000	1	0
Fixed Assets (Tablet PC)	0	0	0
Software for Micro-Modules and Flipped	1,000		
Classroom Teaching			
Total:	97,000	95077.50	1922.50

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: Religion and ethics

Keyword 2: Life and death ethics

Keyword 3: Work ethics

Keyword 4: Environmental ethics

(Least relevant) Keyword 5:

2. Summary

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

Table 2: Publicly accessible online resources (if any)		
MMCD1:	https://blackboard.cuhk.edu.hk/courses/1/2017R2-	
CURE2142/content/_23791	122_1/MMCD1_2018.html	

MMCD2:

https://blackboard.cuhk.edu.hk/courses/1/2017R2-

CURE2142/content/_2388847_1/MMCD2_Teen%20Suicide_Part%202.html

MMCD 3:

https://blackboard.cuhk.edu.hk/courses/1/2017R2-

<u>CURE2142/content/_2481304_1/MMCD%203_work%20ethics_from%20sociological%20</u> perspective.html

MMCD 4:

https://blackboard.cuhk.edu.hk/courses/1/2017R2-

CURE2142/content/_2457079_1/MMCD4_Protestant Ethics.html

MMCD 5:

https://blackboard.cuhk.edu.hk/courses/1/2017R2-

CURE2142/content/_2407840_1/MMCD5_consumption%20ethics.html

MMCD 6:

https://blackboard.cuhk.edu.hk/courses/1/2017R2-

CURE2142/content/_2406464_1/MMCD6_environmental%20ethics.html

Micro-module	A Brief Description of the Content
1. Life and Death: How do	MMCD 1 facilitates students to understand
we talk about Teen Suicide from	a. depression is major illness among teen around the world; and
Socio-Cultural Perspectives	b. The sociocultural factors that affect suicide rates
	the utilitarian position
	 personal autonomy
2. Life and Death: How do	MMCD 2 facilitates students to understand "Religious
we talk about Teen Suicide from	Positions on Suicide". It includes (1) theological position and
Religious Perspectives	Respect for Life and (2) duty of others.
3. Work Ethics – Work for	MMCD 3 facilitates students to understand the milestones that
Money or Developing Talents?	changed our attitudes toward "work" between the 18th to 20th
	century.
4. Work Ethics – Work for	MMCD 4 facilitates students
Money or Developing Talents?	a. to understand Max Weber's "Work Ethics"; and
	b. to investigate the loss of religious faith across the West linked
	to the current crisis in capitalism
5. Environmental Ethics –	MMCD 5 facilitates students to examine social theorists' challenge
consumption and environmental	of the possibility of ethical life in contemporary society in which we
sustainability (from Sociological	are prone to be selfish, and lack of empathy and concern for others,
Perspectives)	and for the common good.

6. Environmental Ethics – consumption and environmental sustainability (from Religious Perspectives)

MMCD 6 facilitates students to understand the contemporary development of "Eco-spirituality" which advocates the connection between human beings and myriad things, and a values-based economic structure.

Table 3: 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	<u>Platform</u>
CURE 2142	2 nd term 2017-18	25	Blackhoard
Religion and Ethics	2 ieim 2017-10	33	Бійсковага

Table 4: 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	
(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 5: 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).

A central aspect of Ethics is "the happiness of life", the life worth living or life that is simply satisfying. Most religions emphasize ethical and spiritual values. The study of religious ethics can help students, on the one hand, to understand the social issues around us; and on the other hand, to develop moral characters. These are important keys to global citizenship in the 21st century.

This project developed 6 micro-modules to facilitate our students to (1) understand the current debate on some controversial issues in our global society (e.g. Suicide, Work Ethics and Environmental Ethics); (2) to formulate and articulate their views on select ethical issues; (3) to enhance their understanding of justice in public policy dimensions, and (4) to consider their own role in bringing about justice through choices by voting, lifestyle, and even consumption patterns.

The quantitative results of student responses showed that they had strong preference for the flipped learning approach in the course of "Religion and Ethics." Students found the accessibility of the micro-modules so that they could view the content outside the formal contact hours. Students liked they interacted more with their peers and the teachers in the class.