THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Scheme 1: Basic Scheme

<u>Final Report (2015-16)</u>

Report due 31 December 2016
Please return by email to The Ad hoc Committee on Planning of eLearning Infrastructure
<u>mmcd@cuhk.edu.hk</u>

<u>PART I</u>

Project title: **<u>Understanding HK Current Economic Issues in Global and Regional Contexts</u>**

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Co-supervisor(s): Dr Yan Win Hin and Mr Hugo Ip

Department / Unit: Economics

Project duration: From January 2016 to December 2016

Date report submitted: Dec 30, 2016

1. Project objectives

Is the project on track to meet its objectives? Have the objectives been changed as a result of the experience of working on your MMCDG project?

　　The produced micro modules meet the five objectives which were stated in the submitted proposal.

1. **Empower students with economic theories and analytical skills to examine the global economic issues.**

2. **Promote global education and raise students' awareness in global economic challenges.**

3. **Practice critical thinking and reasoning skills in analyzing current economic issues.**

4. **Enhance the flipped classroom learning, requiring students to work in groups, debate the issue and express their opinions.**

5. **Help students build teamwork skills and communication skills through group presentation and group discussion.**

2. Process, outcomes or deliverables

Please specify the number of micro modules produced, and the course(s) (with course codes and titles) that have used the micro modules in Part IV, and provide more detailed descriptions here.
Has the nature of the deliverables been changed? Have you adjusted your timeline?
Overall, was the project completed satisfactorily?

Eleven micro modules for two topical issues—one belt one road and aging population—were produced. Each micro module runs no more than 10 minutes with interactive elements, i.e., questions and answers, resource links, transcripts, and animations.

<u>One Belt One Road</u> has three sections, each of which consists of two micro modules, namely S1.1, S1.2, S2.1, S2.2, S3.1 and S3.2 as follows.

Section 1. China's Initiative to Connect with its Neighboring Countries Along the "Belt and Road"

S1 .1: Belt Road Initiative

S1.2: Know Our Neighboring Countries

Section 2: Opportunities and Challenges of Infrastructure Development

S2.1: Opportunities of Infrastructure Development

S2.2: Challenges of Infrastructure Development

Section 3: The Implications on Trade

S3.1 The Implications on Trade

S3.2 Prospects

Section 1 is an introduction of One Belt One Road. S1.1 briefly introduces the Belt Road initiative while S1.2 provides background information of ASEAN (Association of South East Asian Nations) which are the members of the Belt Road countries.

Infrastructure development is one of the pillars of the Belt Road initiative. S2.1 discusses how infrastructure affects economic growth and S2.2 discusses the costs of infrastructure development, i.e., pollution and the race for the bottom in corporate governance.

One goal of the Belt Road is to promote trade. S3.1 applies the trade theory to explain why Belt Road countries trade and S3.2 examines the role of HK in trading.

There are five micro modules for Aging Population in Asia, namely S1, S2, S3.1, S3.2 and S3.3. S1 describes the aging population trends in Singapore, HK, Korea and Thailand, and discusses the determinants of aging population in these economies. S2 explains how aging population affects economic growth. Section 3 examines how these selected economies prepare for aging issues—health care, housing and pension systems.

S1: Demographic Trends in Selected Asian Economies

S2: Economic Implications of Aging Populations

S3.1: Preparing for Aging Population—Health Care for the Elderly

S3.2: Preparing for Aging Population—Living for the Elderly

S3.3: Preparing for Aging Population—Pension Systems

The above videos can be watched inside or outside the classes. As stated in the submitted proposal, the micro modules will be used in the following courses.

1. **ECON3320 Asia-pacific Economies (taught by Ko Kwan Wai)**
2. **GENA1113 Student-Oriented Teaching Workshop (taught by Ko Kwan Wai)**
3. **ECON 2901 Student-Oriented Teaching Workshop (taught by Ko Kwan Wai)**
4. **ECON3620 International Macroeconomics (taught by Ko Kwan Wai)**
5. **ECON2021 Basic Macroeconomics (participant of ADP eLearning programme, taught by Ko Kwan Wai)**
6. **UGEC1825/ ECON1310 Current Hong Kong Economic Issues (taught by Yan Wai Hin)**
7. **ECON2311 Economy of Hong Kong (taught by Yan Wai Hin)**

3. Evaluation Plan

Have you altered your evaluation plans?What monitoring data did you collect?
Does your evaluation indicate that you have achieved your objectives?

- **The link to the survey is created and it will be attached to the video.**
  https://docs.google.com/forms/d/e/1FAIpQLScjNn08hlESI-HHzhnyQh35vKwsVCrJqRuBLrl0WnXnk4V1SA/viewform?c=0&w=1
  Viewers can simply click the link at any time to fill out the survey when they watch the video.
- **Students of our classes will be asked to fill out hard copies of the survey or the online survey after watching the video.**
- **Viewing videos and offering suggestions will be the compulsory assignments to students.**
- **Students are required to watch the videos completely so as to gain marks, and their viewing can be tracked through SCORM.**
- **The videos will be released in 2017 and the surveys will be conducted afterwards.**

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 videos will be used not only in our courses, but also in other institutions, like Concordia University in Canada, Assumption University in Thailand and Hong Kong Institute of Vocational Education. The teachers in these institutions are our members of the production team.

In addition, the videos will be disseminated to the public through YouTube.

PART II

Financial data

Funds available: HK$100,000

Funds awarded from MMCDG	$	100,000
Funds secured from other sources	$	0
(please specify_____)		
Total:	$	100,000

Expenditure:

Item	Budget as per application	Expenditure	Balance
Service cost	32,000	31,720	280
Staff cost	33,000	10,840	22,160
Equipment/software	35,000	57,440	-22440
Total:	100,000	100,000	0

PART III

Lessons learnt from the project

Please describe your way forward.
For this project, the micro modules with interactivity have been produced using the software, Articulate. Other forms of micro modules, i.e., online games and role-play scenarios, can be explored with the aid of Articulate and other animation software.

Please describe any of the following item(s) accordingly:
• *Key success factors, if any*
Understanding expertise required for different stages of video production and coordinating different parties to meet the timeline are important to complete the micro modules.

• *Difficulties encountered and remedial actions taken, if any*
The major difficulties encountered are the technical problems in designing and applying the software to produce the micro modules. ELITE resolves some technical problems.

• *The role of other units in providing support, if any*
The Centre for eLearning Innovation and Technology (ELITE) provides technical support (i.e., corrections of typos and animations) for final polishing of the videos.

• *Suggestions to CUHK, if any*
Example: what should be done differently?
• **Provide basic software training to students and teachers.**
• **Subscribe the educational software facilitating teachers to use the software from time to time.**
• **Invite software developers to introduce the latest development of technology.**

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: Belt Road

                        Keyword 2: Aging population

                        Keyword 3: Economic perspectives

                        Keyword 4: Asia

(Least relevant)   Keyword 5: Hong Kong

2. Summary

Please provide information, if any, in the following tables, <u>and provide the details in Part I</u>.

Table 1: Publicly accessible online resources (if any)
(a) **Project website:**   *If a publicly accessible project website has been constructed, please provide the URL.*   **There are 11 micro modules for two topical issues—one belt one road and aging population.**   **Each micro module runs no more than 10 minutes with interactive elements, i.e., questions and answers, resource links, transcripts, and animations.**   **I. One Belt One Road**   **<u>One Belt One Road</u> has three sections, each of which consists of two micro modules, namely S1.1, S1.2, S2.1, S2.2, S3.1 and S3.2 as follows.**   **Section 1. China's Initiative to Connect with its Neighboring Countries Along the "Belt and Road"**   *S1 .1: Belt Road Initiative*   *http://s3.amazonaws.com/One_Belt_One_Road/%E2%80%9DOne%20Belt%20One%20Road%E2%80%9D%20%20Belt%20Road%20Initiative%20-%20Storyline%20output/story.html*   *S1.2: Know Our Neighboring Countries*   *http://s3.amazonaws.com/One_Belt_One_Road/%E2%80%9DOne%20Belt%20One%20Road%E2%80%9D%20%20Know%20Our%20Neighboring%20Countries%20-%20Storyline%20output/story.html*

Section 2: Opportunities and Challenges of Infrastructure Development

S2.1: Opportunities of Infrastructure Development

http://s3.amazonaws.com/One_Belt_One_Road/%E2%80%9DOne%20Belt%20One%20Road%E2%80%9D%20%20Opportunities%20of%20Infrastructure%20Development%20-%20Storyline%20output/story.html

S2.2: Challenges of Infrastructure Development

http://s3.amazonaws.com/One_Belt_One_Road/%E2%80%9DOne%20Belt%20One%20Road%E2%80%9D%20%20Challenges%20of%20Infrastructure%20Development%20-%20Storyline%20output/story.html

Section 3: The Implications on Trade

S3.1 The Implications on Trade

http://s3.amazonaws.com/One_Belt_One_Road/%E2%80%9DOne%20Belt%20One%20Road%E2%80%9D%20%20The%20Implications%20on%20Trade%20%20-%20Storyline%20output/story.html

S3.2 Prospects

http://s3.amazonaws.com/One_Belt_One_Road/%E2%80%9DOne%20Belt%20One%20Road%E2%80%9D%20%20Prospects%20-%20Storyline%20output/story.html

II. Aging Population in Asia

There are five micro modules for Aging Population in Asia, namely S1, S2, S3.1, S3.2 and S3.3.

Section 1: Demographic Trends in Selected Asian Economies

http://s3.amazonaws.com/Aging_Population/Demographic%20Trends%20in%20Selected%20Asian%20Economies/index.html

Section 2: Economic Implications of Aging Populations

http://s3.amazonaws.com/Aging_Population/Economic%20Implications%20of%20Aging%20Population/index.html

Section 3.1: Preparing for Aging Population—Health Care for the Elderly

http://s3.amazonaws.com/Aging_Population/Preparing%20for%20Aging%20Population-Health%20Care%20for%20the%20Elderly/index.html

Section 3.2: Preparing for Aging Population—Living for the Elderly

http://s3.amazonaws.com/Aging_Population/Preparing%20for%20Aging%20Population%20-%20Living%20for%20the%20Elderly/index.html

Section 3.3: Preparing for Aging Population—Pension Systems

http://s3.amazonaws.com/Aging_Population/Preparing%20for%20Aging%20Population%20-%20Pension%20Systems/index.html

(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.

Articulate and Adobe Creative Cloud are used. The Centre for eLearning Innovation and Technology (ELITE) provides technical support for the production of micro modules. A graduate from Hong Kong Institute of Vocational Education creates animation.

(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.

Overall speaking, the micro modules provide background information and analyzes issues using economic models, data analysis and news. Students can watch the videos before or after or during the class, depending on the course structure and teachers' preferences.
Using the One Belt One Road videos as examples, students can watch the introductory videos (i.e., Section 1) before the class. With the background, a teacher can teach the economic models in the class. After the lectures, students can go home to watch the videos (sections 2 & 3) to review the concepts and the application they learn from the class.
As for the Aging Population videos, students can be asked to watch the videos to prepare for the group discussion of aging population issues-- health care, housing and pension systems--in the class.

(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.

Course Code/ Target Students	Term & Year of offering	Approximate No. of students	Platform
ECON3320 **Asia-pacific Economies**	*2nd term 2016*	*80-100*	*Blackboard*
ECON 2901 **Student-Oriented** **Teaching Workshop**	*2nd term 2016*	*15-20*	*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)	*Please insert no*
(b) In workshop/retreat organized for CUHK teachers (e.g. CLEAR workshop, workshop organized by other CUHK units)	*Please insert no*
(c) In CUHK ExPo jointly organized by CLEAR and ITSC	*Please insert no*
(d) In any other event held in HK (e.g. UGC symposium, talks delivered to units of other institutions)	*Please insert no*
(e) In international conference	*Please insert no*
(f) Others (please specify)	*Please insert no*

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	*Please insert no*
(b) Project leaflet	*Please insert no*
(c) Project booklet	*Please insert no*
(d) A section/chapter in a booklet/ book distributed to a limited group of audience	*Please insert no*
(e) Conference proceeding	*Please insert no*
(f) A chapter in a book accessible internationally	*Please insert no*
(g) A paper in a referred journal	*Please insert no*
(h) Others (please specify)	*Please insert no*

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.

The objectives of the eleven micro modules for two topical issues--One Belt One Road and Aging Population--are as follows.
1. **Equip students with knowledge and background information to discuss the related issues in the class.**
2. **Support teachers' lecturing on economic models or further discussion of the issues.**

3. Demonstrate how to build the economic framework to study HK current issues, i.e., One Belt One Road and aging population in a regional context.
4. Provide students the self-study opportunities to learn at their own paces and reinforces students' understanding of the issues and economic models.

Unlike the micro modules produced for the last year's project, these micro modules are developed with more analytical contents, better animation design and higher interactivity. As for the content, the micro modules not only explain the basic economic concepts, but also apply economic models (i.e., comparative advantage, Solow model, national income accounting) to analyze the current issues. In addition to the theory, the study tools commonly used for economics--data analysis, empirical findings and numerical examples--are also applied. News are also extracted to link discussion to real-world economic activity.

To stimulate students' interests in learning, the micro modules are designed with animation, buzzwords, funny cartoons and lively conversation.

Watching videos is no longer a passive learning. To engage students in learning, they are required to answer questions and click different buttons to find more sources. There are different types of questions in the micro modules. Review questions help students review or understand the materials. Problems require students to read the news, tables or figures in the micro-modules. Open-end questions encourage students to think deeply. After students submit the answers, the correct answers or suggested answers will automatically appear, allowing students to check whether they answer correctly. The Resources Tab is created, enabling viewers to click the web links to read the reports or articles easily.

The survey is designed to improve the design and content of the micro modules on the one hand; and to evaluate the effectiveness of eLearning on the other. The survey links are created and attached on the micro modules, ensuring that all viewers (including the public) are able to provide feedback to us. The survey results would help us produce better micro modules in the near future and prepare for a journal publication about eLearning.

With the accumulative experiences and knowledge of producing micro modules in the last two years, we would continue to advance the micro modules in different forms, i.e., online games and role-play scenarios.