

THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

Scheme 2: Studies in Foundation Courses

Final Report (2015-16)

Report due 31 December 2016

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

PART I

Project title: Flipped Learning in a Financial Management Course

Principal supervisor: Dr. Anson C. K. AU YEUNG

Co-supervisor(s): Nil

Department / Unit: Finance

Project duration: From January 2016 to December 2016

Date report submitted: 31 December 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 objective of this project is to develop micro-modules to facilitate flipped learning in FINA2010 Financial Management. The project is on track to meet its objective.

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?

In the past 12 months, 10 micro-modules have been produced. Each micro-module is a self-contained 10 to 15 minutes annotated video for supporting the flipped teaching. These micro-modules will facilitate flipped teaching in FINA2010 Financial Management.

	2016							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Theme 1 Micro-module 1,2,3								
Theme 2 Micro-module 4,5								
Theme 3 Micro-module 6,7,8,9,10								
Final Editing								

According to the plan, the progress is on track. All micro-modules are completed and ready to implement.

Overall, the project completed satisfactorily. The table below shows how these micro-modules are accompanied with the class activities.

Micro-module	Objective	Related Class Activities
Theme 1: The Big Picture of Financial Management		
Micro-module 1: Why Study Financial Management	<ul style="list-style-type: none"> To familiarize the role of financial manager and understand the value implications behind the financial decision analysis. 	(1) The Corporate Governance Game. <ul style="list-style-type: none"> To analyze the separation between the different claimholders in the firm, and the consequences for the firm's objective function.
Micro-module 2: The Objective of Financial Management	<ul style="list-style-type: none"> To introduce the shareholders' value principle of financial management. 	
Micro-module 3: The Agency Problem and Control of the Corporation	<ul style="list-style-type: none"> To explain the concept of agency problem. To illustrate financial managers face conflict-of-interests between different stakeholders in the society. 	

Micro-module	Objective	Related Class Activities
Theme 2: Discounted Cash Flow Analysis		
Micro-module 4: Free Cash Flow	<ul style="list-style-type: none"> To introduce the intuition of free cash flow. 	(1) Case Analysis: Ocean Carriers <ul style="list-style-type: none"> To develop an understanding of how discounted cash flow analysis can be used to make investment decisions.
Micro-module 5: Time Value of Money	<ul style="list-style-type: none"> To apply the compounding and discounting techniques for valuing cash flows at different time. 	

Micro-module	Objective	Related Class Activities
Theme 3: Long-term Investment Decision		
Micro-module 6: The Net Present Value	<ul style="list-style-type: none"> To understand and discuss the use of NPV, IRR, Payback and PI as investment criteria. 	(1) Case Analysis: Danforth & Donnalley Laundry Products Company <ul style="list-style-type: none"> To identify relevant cash flows.
Micro-module 7: The Internal Rate of Return		
Micro-module 8: The Payback Period		
Micro-module 9: The Profitability Index		
Micro-module 10: The Capital Budgeting Process	<ul style="list-style-type: none"> To differentiate between relevant cash flow and an irrelevant cash flow. To describe the steps involved in estimating cash flow and in putting together a time line format. 	(2) Excel Application: Simulation Analysis in Capital Budgeting Projects <ul style="list-style-type: none"> To apply the Monte Carlo simulation for assessing the risk of project.

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 evaluation plan will undergo as planned. It includes a basic finance literacy test in the beginning of the course and a pre- and post-learning experience student surveys in order to measure the students' initiatives for the online self-study.

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 following components have been developed:

- 10 videos.
- 10-set MC quizzes for each module.
- Teaching materials for the face-to-face lecture.
- A corporate governance game for supplementing Theme 1.
- A business case to supplementing Theme 2.
- A business case to supplementing Theme 3.
- A Monte Carlo simulation case.

PART II

Financial data (up to Nov 30, 2016)

Funds available:

Funds awarded from MMCDG	\$ 90,985
Funds secured from other sources (please specify _____)	\$ _____
Total:	\$ 90,985

Expenditure: (up to Nov 30, 2016)

Item	Budget as per application	Expenditure	Balance
Fixed Assets		16,288.00	
Other Expenses		9,185.00	
Computer Software		1,419.17	
Printing, Stationary & Supplies		780.00	
Staff Cost		55,807.15	
Total:		83,479.32	7,505.68

PART III

Lessons learnt from the project

Please describe your way forward.

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

- *Key success factors, if any*
- *Difficulties encountered and remedial actions taken, if any*
- *The role of other units in providing support, if any*
- *Suggestions to CUHK, if any*
 - *Example: what should be done differently?*

There are significant challenges. Producing the micro-modules requires careful planning. All course materials and information must be delivered to students before the term starts. When producing the videos, we can be guided by some of the experiences at other projects. For example, it is better to keep the videos short and break the lectures into segments of about 7 to 10 minutes. Make a script and write what we are going to say in advance. In the future, we may explore the possibilities to incorporate “animated cases” in the videos.

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 Learning
 Keyword 2: Financial Management
 Keyword 3: Discounted Cash Flow Analysis
 Keyword 4: Investment Decisions
- (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:

If a publicly accessible project website has been constructed, please provide the URL.

(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.

(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.

(e) 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>
<i>FINA2010</i>	<i>2nd term 2017</i>	<i>120</i>	<i>Blackboard</i>

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)	<i>Please insert no</i>
(b) In workshop/retreat organized for CUHK teachers (e.g. CLEAR workshop, workshop organized by other CUHK units)	<i>Please insert no</i>
(c) In CUHK ExPo jointly organized by CLEAR and ITSC	<i>Please insert no</i>
(d) In any other event held in HK (e.g. UGC symposium, talks delivered to units of other institutions)	<i>Please insert no</i>
(e) In international conference	<i>Please insert no</i>
(f) Others (please specify)	<i>Please insert no</i>

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

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 the 2016 – 2020 CUHK strategic plan, one of the key initiatives in education is to enhance critical thinking and self-learning skills, using eLearning and innovative pedagogies, to nurture students as lifelong learners and global leaders. The flipped classroom is a strategy to address this initiative, and this project is to explore the use of flipped learning at the introductory foundation course.

To get started, I have attended two workshops organized by the ELITE Center. These workshops are very informative. Not only they help me to understand how to flip a class, but also teach me how to use Camtasia and its editing facilities.

I expect there will be significant challenges to putting flipped teaching in the classroom, these challenges include student engagement with the pre-recorded materials, attendance issues when the lecture materials are available on Blackboard. To encourage students to prepare, I decide to break the exercises into small pieces and ensure students have time and able to complete pre-session activities. It is also important to provide opportunities for them to discover what they understand and what they do not. Thus, they may have a better motivation to attend class. All in all, these skills take time and experience to develop.

Finally, a critical factor is to ensure my students buy-in the approach. I should make sure that students know exactly what is expected although there will be some students who do not appreciate my efforts.