

II Project Information	
Project Title (in English) Development of Mobile Learning Platform, Production of Mobile Learning Content and Integration with Learning Management System	Project Title (in Chinese) 開發移動學習平台， 制作移動學習內容並與網上學習管理系統整合
A. Project Summary	
<p><i>(please provide an executive summary of the project proposal in no more than 500 words).</i></p> <p>The availability of smart phones has provided a significant opportunity for students to learn outside the classroom. This, in turn, should affect the way teachers design their class sessions. Ideally, the classroom should no longer be a place for lectures (distribution of information), but rather it should be a place for teacher-learner interaction, knowledge integration, and inquiry.</p> <p>The ability for students to use smart phones and other mobile devices to listen and watch past lectures before going to class, linking the lecture material with existing copyright-free learning content from YouTube, iTunes, news sites and current online events, reviewing past content information for continuity, will enable a more effective use of classroom time.</p> <p>This project proposes to setup a basic technical infrastructure to enable the production of mobile learning content (audio and video) for students taking Associate Degree courses at CUTW. This project also includes the provision (and integration of the mobile content) with a Learning Management System to assist lecturers to interact with students through Moodle, a popular free open-source e-learning portal.</p> <p>In line with many Universities overseas as well as some local UGC funded Universities, we aim to make the learning content that we produce to be searchable and publicly and freely downloadable via Apple© iTunes U service. Thus, the mobile content will not only be beneficial to CUTW students but also to the wider community of Hong Kong.</p>	
B. Project Objectives	
<p><i>(please identify the needs of the target recipients and explain how the project aims to address the needs).</i></p> <p>The implementation of this project will enable CUTW students (and others) to download, listen and/or watch lecture podcasts on their own time and as frequently as they wish. This allows students to gain a deeper understanding of the course material. This is especially true for students who wish to better capture key learning concepts as well as improve their English listening skills.</p> <p>Another capability that this project will provide is the ability for teachers to interact with students outside of the classroom as well as manage the learning process of students via the Learning Management System.</p> <p>The availability of the mobile learning infrastructure at CUTW will inspire teachers to transform their class time into more interactive discussion sessions. Thus, helping students to improve their critical thinking and communication skills.</p> <p>The technical infrastructure will also permit the production and posting of presentations by industry guests (from the Tung Wah Group of Hospitals network) that are regularly held on campus, thus allowing a wider audience to benefit from the sharing of success stories and experiences of the speakers.</p> <p>Specifically, the objectives of the project are:</p> <p>(1) To allow students access to real-time class activities from home. For example, a student who is</p>	

sick and is unable to be physically in class may still attend the lecture via the “virtual classroom”

- (2) To foster a 24/7 access to off-line learning by the community inside and outside of CUTW.
- (3) To leverage the use of smart phones and other mobile devices for access to learning contents.
- (4) To make the classroom a place where students can focus on interactive with the teacher as opposed to the traditional one-way information transfer.
- (5) To free classroom time for instructors to focus on more value-adding activities such as learning assessment and feedback by making outside-of-classroom learning an integral part of the course.
- (6) To enable students to have mobile access to non-traditional learning materials such as interviews with experts, lectures from other institutions of higher learning.
- (7) improve the English listening skills of students

C. Outcomes and Deliverables of Project

(please include the expected number of target beneficiaries and explain how they will benefit from the project).

Within CUTW, there will be 1700 students (expected to increase to over 2000 students in 2-3 years time) who are expected to benefit from the results of this project. More importantly, students and the public at large in Hong Kong and elsewhere will have free access to the content which will be posted on YouTube and iTunes U sites.

Deliverables of this project include the following:

Learning Management System (LMS)

- Enables all of our students to learn online.
- Permits easy retrieval of learning materials from LMS via the web. The necessity of printing hardcopies will be reduced, helping to sustain the environment.
- Multimedia course content can be accessed via smart phones and other mobile devices.

Virtual Classroom

- Offers an interface and built-in interactive tools to let students attend real-time classes from home.
- Performs web conferencing for group discussion.

Course Content Development

- The platform will enable narrations, animations, interactivity and quizzes to be added to course materials that can be published in the LMS.
- The platform will allow production of audio and video content that may be exported to the LMS as web content.
- The platform will deliver quizzes and surveys with question pooling and randomization. The tool will also be able to track and measure students' learning effectiveness in a timely and effective manner.

** Please refer to the appendix which contains information on the hardware technology that we have researched that enables the implementation necessary for this project.

D. Implementation Details

The project will be carried out in five stages which include the design stage, development stage, implementation stage, pilot stage and operation stage. The planned completion of the five stages is 24 months. Each stage is elaborated below:

Design Stage and Early Development (6 months)

Identifies detail requirements of the mobile learning platform and the technical issues of the IT infrastructure. Preparation of tender document. Tendering process is included in this stage.

Development Stage (6 months)

After evaluation and selection of vendors, the development work included in this stage consists of:

- Tailor/customization programme development.
- e-Learning Content development
- Assessment (i.e., quiz) database development
- The Content Authoring Tools will be purchased in this stage.

Implementation and Pilot Testing Stage (6 months)

Following the completion of functional test of the system and content, the Implementation stage will include the following steps:

- Hardware and software procurement and installation
- System testing
- Documentation and staff training
- 3 months of trial run period will be devoted for system fine tuning and configuration

Operation Stage and nursing period (6 months)

Post-implementation review and user feedback on the e-learning system will be collected for further improvement.

E. Implementation Schedule <i>(Please extend this table if necessary.)</i>		
Estimated start date of project:		<u>1 November 2011</u>
Action <i>(please indicate key milestones)</i>	Timeframe	Cash flow Requirement
Design and early development Stage (first reporting period) <ul style="list-style-type: none"> • Identify the requirement of the e-learning system. • Tendering specification and procedure. • Prototype demonstration • Functional specification review and confirmation • Initial System development (Use 4 months of developer I)	1 st to 6 th month	HK\$436,000
Ongoing Development Stage <ul style="list-style-type: none"> • System development • Content development • Purchase Hardware and Software (Use 6 months of developer I, 4 months of developer II)	7 th to 12 th month	HK\$632,000
Implementation and testing Stage <ul style="list-style-type: none"> • Installation • Testing • Documentation and training of teaching staff • Provide training to the students • promote the e-learning in teaching and learning • System tuning and configuration adjustment (Use 6 months of developer I, 2 months of developer II)	13 th to 18 th months	HK\$324,000
Operation stage and nursing period <ul style="list-style-type: none"> • Production launch • Post-implementation review and project evaluation • Collect users' feedback (Use 3 months of developer II)	19 th to 24 th month	HK\$75,000
Estimated delivery date of project:		<u>31 Oct 2013</u>

F. Project Budget			
	Amount in HK\$		
Projected Expenditure <i>(Please provide detailed breakdown under each item)</i>	Year 1	Year 2	Total
a. Manpower			
1. Project mgr (20 months)	\$560,000	\$400,000	\$960,000
2. Developer I (16 months)			
3. Developer II (9 months)			
b. Equipment and Facilities			
4. Learning Mgt System	Use existing system		
5. Virtual Classroom System Adobe Connect 8 Server License Connect 8 Pro- Name Organizer x 10 Services - Installation and configuration service - Tailor/Customization service - Training	\$80,000 \$25,000 \$50,000		\$155,000
6. Multimedia Library Flash Media Interactive Server License Services - Installation and configuration service - Tailor/Customization service - Training	\$50,000 \$100,000		\$150,000
7. Content Authoring Tools Adobe Acrobat Suite (2 licenses) - Acrobat professional - Presenter - Captivate - Photoshop CS5 - Media Encoder Licenses for video editing software Training Service	\$20,000 \$15,000 \$15,000		\$50,000
8. Hardware Infrastructure Server for LMS x 1 Server for Virtue Classroom x 1 Server for Multimedia Library x 1 Video camera with accessories Installation and implementation service	\$40,000 \$40,000 \$40,000 \$13,000 \$20,000		\$153,000
Sub-total			\$508,000
c. Others			
Completion of Project Audit Fee		\$15,000	\$15,000
Total Expenditure :	\$1,068,000	\$415,000	\$1,483,000

Projected Income	Amount in HK\$	
	Year 1	Total
a. (e.g. fees received)		0
Total Income :		0
Sources of Funding		
a.	Amount of grant sought under this application: <u>HKD\$1,483,000</u>	
b.	Other sources of funding (<i>this may include donations, contributions from the applicant/its parent organization, etc. Please give the name(s) of the sponsor(s), the amount of funding, and indicate whether the funding has been secured.</i>):	
(i)	<u>NA</u>	
(ii)	<u></u>	
(iii)	<u></u>	
...	<u></u>	

G. Monitoring and Self-evaluation Mechanism

A Project steering committee will be formed and project management control will be enforced. The project steering committee will be chaired by the President. A project manager will be appointed by the Chairman of the Steering Committee, and regular progress reports will be submitted to the Committee for scrutiny. Questionnaires will be sent to users to measure the effectiveness and performance of the mobile learning platform, and members of the Strategic Management and College Affair Committee will be invited for the discussion of feedback results.

The following measures will be introduced to monitor the project implementation and on-going performance.

1. Project Steering Committee
2. Appointment of Project Manager
3. Progress report
4. Post implementation review
5. User feedback mechanism; and
6. Final evaluation report.

H. Management Support and Key Personnel Involved

The project is supported by the following management staff

- President
- Acting Head of the School of Business
- Head of Information Technology Services Unit
- Bursar
- Head of Facilities Management Office
- Head of Administration and Human Resources

I. Special Justifications if the Grant Sought Exceeds \$2 million

N.A.

III Other information**1 Project Sustainability** *(If applicable, please describe how the recurrent expenditure involved will be met after completion of the proposed project)*

Mobile learning is a necessity for the CUTW to carry out its mission of providing a most suitable environment for teaching and learning. Once the project is fully implemented, recurrent expenditure involved beyond the first 2 years will be borne by CUTW and/or its successor (Tung Wah College). The Information Technology Services Unit (ITSU) has also committed to provide technical support for the on-going operations and maintenance.

2 Preparatory work done *(If any)***3 Past experience in organizing projects of similar or relevant nature and achievements** *(If any)*

We are in the process of implementing a Management and Marketing Laboratory. It is expected that this laboratory will be used to create the learning contents described in this project.