II   Project Information

Project Title (in English)	Project Title (in Chinese)
Development of a Knowledge Management Platform for Resource Sharing in Teaching and Learning	建立教學資源分享的知識管理平台

A.   Project Summary

(please provide an executive summary of the project proposal in no more than 500 words).

Information and communication technology is being widely used in all kinds of educational institutions. After over 10 years, the HKU SPACE Community College has actively developed and accumulated a great deal of varied resources, including teaching and learning materials, learning activities, extra-curricular activities, teaching pedagogy, student guidance, experience sharing of students and graduates, and invited lecturers, to name a number of them. These resources are valuable knowledge-assets, which need to be preserved for sharing in an electronic mode, at the HKU SPACE Community College.

The organization of these resources and promotion of knowledge transfer is a long-term strategy within the HKU SPACE Community College. It could reduce the demand on re-developing the same resources and enhance teaching and learning effectiveness and efficiency through sharing quality education resources and good practices.

This project is intended to design and develop an online knowledge management platform to accommodate all existing teaching and learning resources at the HKU SPACE Community College. These resources could be shared, re-used, adapted or adopted, re-built by teachers and students anytime, anywhere. The forms of the teaching and learning resources include digital or non-digital resources, audio-visual materials, and text resources.

The knowledge building environment will consist of four components: (a) storage (b) access (c) distribution, and (d) encourage collaboration. The ultimate goal is to develop a community of practice at the Community College for staff and students to share, reuse, invent, extend, and co-build teaching and learning resources.

This project includes five steps:
- ✓ develop a system with an appropriate taxonomy model in order to manage useful teaching and learning resources,
- ✓ classify various teaching and learning resources, which will enable staff and students to search and retrieve relevant knowledge and resources,
- ✓ develop a FAQ mechanism to provide just-in-time support for common questions for use of knowledge management system,
- ✓ develop communication tools to provide synchronize and asynchronous discussions,
- ✓ continuously enhance and refine the knowledge management system based on teacher and student feedback.

B.	Project Objectives

(please identify the needs of the target recipients and explain how the project aims to address the needs).

Target Recipients

All 250 staff and teachers and 7,150 students from HKU SPACE Community College will benefit from this project.

They would benefit from the project in the following aspects:
- Staff will be provided the latest knowledge-assets such as teaching materials, learning objects, audio-visual materials, assessment strategies, teaching and learning pedagogy, and self-directed learning information. All information can be searched and retrieved in the system immediately.
- Students will be provided the latest knowledge-assets such as learning materials, learning objects, audio-visual materials, language learning resources, and research and journal articles which are helpful to their learning experiences.
- Staff will benefit by reusing or developing their own teaching materials based on existing successful practice. This could be a 'Time saver' and reduce redundant expenditure.
- Staff and students will benefit by learning from each other and extending their competence further.
- Staff and students will be provided with a creative, open-minded and collaborative environment of teaching and learning resources.
- Staff and students will be provided with a knowledge-building environment that becomes an integral part of the College culture.

Project Objectives

✓ Develop an organizational knowledge-based assets library to retain good teaching and learning practice, diffuse knowledge, and share resources for staff and students.

✓ Develop a knowledge management system to enhance staff members' teaching quality and offer staff continuous professional development.

✓ Develop an organizational knowledge management strategy to facilitate a sustainable and transferable professional teaching and learning practice.

✓ Leverage the collective knowledge in the Community College and strengthen collaborations in order to create a more competitive organization.

✓ Develop an organizational culture for sharing good teaching and learning resources, experiences, and practice.

C.	**Outcomes and Deliverables of Project**

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

The deliverables of this project are:
- A systematically-organized knowledge-asset system at HKU SPACE Community College
- Classification and conversion of all teaching and learning resources into a digital format
- An uploading and sharing mechanism, which allows all staff to share their knowledge-assets
- An open platform for all staff and students to access, retrieve, and share resources and information
- A search engine to cater for specific staff and student needs
- A search function and instant feedback and answers
- Workshops on using the knowledge management platform for staff and students
- Use of focus group discussions to receive user's feedback for improvement
- Shared project outcomes with other educational institutions

D.	**Implementation Details**

This project will be implemented in two phases:

(a) Phase I: Setup the knowledge management system and communication platform:
- Design and develop the knowledge management system
- Classify all teaching and learning resources
- Pilot-run the knowledge management system
- Test system through pilot-run
- Provide training workshops to staff and students in the pilot-run
- Revise knowledge management system
- Provide training workshops for staff and students
- Promote the use of the system

(b) Phase II: Evaluate the effectiveness of the knowledge management system, identify areas for further improvement, and fine tune the system
- Collect feedback from staff and students via focus group discussions.
- Analyze students' experience of using the system, including the effectiveness and user friendliness of the search tools and communication tools, the satisfaction and usefulness of the content before and after launching the knowledge management system.
- Analyze staff experiences of using the system, including teaching confidence, teaching effectiveness, teaching skills, IT skills for teaching, communication efficiency and work efficiency before and after launching the knowledge management system.
- Revise and enhance the knowledge management system based on users' feedback.
- Consolidate the organizational knowledge building practice in terms of knowledge-based assets including sharing of good practice, reusability of resources, effective communication, and sustainable development.

E.	**Implementation Schedule** *(Please extend this table if necessary.)*		
	Estimated start date of project:	**Sep-2011**	
	Estimated completion date of project:	**Feb-2014**	
	Action *(please indicate key milestones)*	**Timeframe**	**Cashflow Requirement**
	1st six-months		
a.	Study and define the scope and scale of the knowledge management system	Sep 2011	
b.	Form the project team	Sep – Nov 2011	
c.	Select existing teaching and learning resources	Sep – Nov 2011	
d.	Collect 1st batch of raw data and electronic learning materials from the College	Dec 2011 – Feb 2012	
e.	System planning (Phase I - planning) • Devise the infrastructure of the system • Design the system framework and features • Review the system framework • Finalize the system framework	Oct 2011 – Feb 2012	
f.	Develop the online system • System requirement study • Feasibility studies • Purchase computer facilities	Dec 2011 – Feb 2012	**HK $405,400**
	2nd six-months		
a.	Develop the online system • System deployment • System test	Mar 2012 – May 2012	
b.	System development (Phase II - implementation) • Implement system framework • Revise features available in the system • Review the system framework • Finalize the system framework • Approve the system framework	Jun – Aug 2012	
c.	Set up the online system • System setup • Data deployment (upload share materials) • Integrate the system framework into the online platform	Jun – Aug 2012	
d.	Implement 1st batch of learning materials in the system	Jul – Aug 2012	**HK $271,400**

	3rd six-months		
a.	System development (Phase II - implementation) • Implement system framework • Revise features available in the system • Review the system framework • Finalize the system framework • Approve the system framework	Sep – Dec 2012	
b.	Collect 2nd batch of raw data and electronic learning materials from the college	Sep – Dec 2012	
c.	Set up the online system • System setup • Data deployment (upload share materials) • Integrate the system framework into the online platform	Sep 2012 – Feb 2013	
d.	Implement 2nd batch of learning materials in the system	Jan 2013 – Feb 2013	
			HK $284,400
	4th six-months		
a.	Collect 3rd batch of raw data and electronic learning materials from the college	Mar – Apr 2013	
b.	Implement 3rd batch of materials in the system	Mar – Apr 2013	
c.	Provide training workshops to staff and students	May 2013	
d.	Launch the knowledge management system	May 2013	
e.	Provide pre-test activities for pilot group	Jun – Jul 2013	
f.	Collect student feedback and evaluate the effectiveness of the system and enhance their learning experience • Conduct focus group discussions • Data analysis	Jul – Aug 2013	
g.	Collect staff members' feedback and evaluate the effectiveness of the system and impact on teaching quality • Conduct focus group discussions • Data analysis	Jul – Aug 2013	
			HK $267,900

	5th six-months		
a.	Provide pre-test activities for pilot group	Sep – Nov 2013	
b.	Collect student feedback and evaluate the effectiveness of the system and enhance their learning experience • Conduct focus group discussions • Data analysis	Oct – Nov 2013	
c.	Collect staff members' feedback and evaluate the effectiveness of the system and impact on teaching quality • Conduct focus group discussions • Data analysis	Oct – Nov 2013	
d.	Evaluate the system effectiveness	Dec 2013 – Feb 2014	
e.	Define refinement items for the knowledge management system and provided features	Feb 2014	
f.	Consolidate the knowledge management practice	Feb 2014	
			HK $312,900

F.	Project Budget			
Projected Expenditure *(Please provide detailed breakdown under each item)*	**Amount in HK$**			
	Year 1	**Year 2**	**Year 3**	**Total**
a. Manpower • 1 System Developer (see Note 1) • 1 Project Officer (see Note 2)	280,800 193,440	280,800 193,440	140,400 96,720	**1,185,600**
b. Equipment / Facilities • Servers • 2 notebook PCs • Special software tools and accessories	100,000 20,000 14,000			**134,000**
c. Services • Design and preparation of the system *(Please refer to Appendix 1 for the detailed breakdown)* • Interactive online tutorial production *(Produce 12 video tutorials at HK$2,000 each.)*	50,000	25,0 00 16,000	 8,000	**99,000**
d. Others (e.g. auditor's fee) • General Expenses (printed materials, user guide, promotion materials) • Costs of organizing workshops / sharing sessions *(Please refer to Appendix 1 for the detailed breakdown)* • Costs of organizing seminars/conferences *(Please refer to Appendix 1 for the detailed breakdown)* • Auditor's fees		10,000 8,500	5,000 8,500 33,000 12,000	**77,000**
Contingency (3% of total project costs)				**46,400**
Total Expenditure :				**1,542,000**

Sources of Funding

a. Amount of grant sought under this application: $1,542,000
Other sources of funding *(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.)*:
Not applicable

Notes
(1) The system developer will provide knowledge management system development and support. Duties include:
- develop the system framework and conduct feasibility studies
- set up and customize the knowledge management system
- provide on-going enhancement of the knowledge management system to provide a user friendly platform
- develop communication tools
- implement learning materials in the system
- provide on-going technical support
- upload shared materials and set up user accounts and provide account maintenance services
- provide security control, backup and recovery of the knowledge management system
- generate system progress and monitoring reports regularly

(2) The project officer will provide project coordination and administrative support. Duties include:
- assist the project manager to mange and coordinate the project
- work closely with the programme staff, teachers and technical staff to coordinate the survey and evaluation support
- measure project outcomes by conducting the User Experience Survey, analyzing student outcomes and journal writings, measuring the participations index
- coordinate teacher and student interviews
- conduct training to teach teachers and students to use the knowledge management system effectively

G.	Monitoring and Self-evaluation Mechanism

Monitoring of the Project

The project will be steered by a project committee comprising the key personnel, members, and consultants of this project. Regular progress checking and monitoring will be performed to ensure the project will be implemented within budget and will be delivered on time.

H.	Management Support and Key Personnel Involved

The project is fully supported by the management of HKU SPACE. The School will allocate manpower to the project apart from staff requested in the budget.

(a)   Principal investigators
- Prof. T.M. Wong, Principal, HKU SPACE Community College
- Dr. F T Chan, Vice Principal (Academic), HKU SPACE Community College
- Ms Jeanne Lam, Associate Head of Centre for Cyber Learning
- Dr. Zhang Weiyuan, Head of Centre for Research in Continuing Education and Lifelong Learning and Head of Centre for Cyber Learning

(b)   Project team members
- Ms Agnes Fong, IT Officer, Centre for Cyber Learning
- Mr. Chengguai Duan, Research Associate, Centre for Cyber Learning
- Selected teachers from the Community College
- Project Officer (to be recruited)
- System Development Officer (to be recruited)

(c)   Project Adviser
- Professor C. M. Enoch Young, Special Adviser to Director, HKU SPACE; Chief Adviser, HKU SPACE Centre for Research in Continuing Education and Lifelong Learning; Adviser, Centre for Cyber Learning

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

III Other information

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

The knowledge management system will be maintained and supported by the Information Technology Services Unit and the Centre for Cyber Learning of HKU SPACE after completion of this project. This project will be sustained by its nature. The developed knowledge management system will be continuously fine-tuned to cope with the changing teaching and learning needs. With the results and experience gained in this project, an exemplar of knowledge building comprising essential elements can be applied to all academic programmes and department based on the model's nature, project objectives, teachers' and students' needs.

2 Preparatory work done *(If any)*

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

HKU SPACE has used information and communication technology in enhancing teaching and learning since 1999. The School developed and has supported its first online Learning Management System (named SOUL) since year 2000, and is currently re-developing a new online learning platform (SOUL 2.0) to provide a more up-to-date and engaging eLearning platform to cope with new learning needs.