

II Project Information

Project Title (in English)

Learning in an Outcome-based System via Technology and Enhancement of Regulation Strategies (LOBSTERS)

Project Title (in Chinese)

「龍蝦」計劃：於成效為本、資訊科技及增強管理策略中學習

A. Project Summary

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

The Learning in an Outcome-based System via Technology and Enhancement of Regulation Strategies (LOBSTERS) project is based on the idea that various issues concerning student learning should be addressed via an integrative approach, with outcome-based teaching and learning (OBTL) and the cultivation of students' regulation strategies to monitor and steer their learning being two main aspects of this approach. The two aspects are facilitated by information and communication technology (ICT), so the three of them form the endpoints of the triangular framework for the project.

The project aims at piloting OBTL to the design of sub-degree (i.e. Higher Diploma [HD] and Associate Degree [AD]) programmes, with programme delivery supported by ICT (mainly via a web-based learning management system [LMS], such as the WebCT or the Blackboard) to enable students to develop not only discipline-related knowledge and capabilities, but also various regulation strategies for learning. We believe that with the new "3-3-4" academic structure being gradually implemented, it is imperative for institutes in the sub-degree sector to develop OBTL that has become the main approach to programme design in the degree sector, so that the two sectors can be aligned more closely. It is also imperative for these institutes to cultivate in students appropriate attitudes and skills for "learning to learn", and in this regard the enhancement of students' regulation strategies for learning certainly plays a key role.

The project has three main components: (1) in the light of the new AD/HD Common Descriptors, the application of OBTL to revise the extant sub-degree programmes, and develop new ones at the funded institute Caritas Francis Hsu College (CFHC) and its sister institute Caritas Bianchi College of Careers (CBCC); (2) the establishment of a web-based LMS to provide an ICT-rich environment for teaching and learning at CFHC and CBCC; and (3) as part of the quality assurance (QA) system of the two colleges, the development of a feedback system to collect regularly evidence on students' achievement of learning outcomes and their development of regulation strategies for learning. Moreover, staff development is a key element encompassing these three components. While CFHC and CBCC will benefit from the project in terms of the improvement in student learning and the experience and expertise gained by their staff, it is expected that the project has also the potential to effectuate an indirect and gradual impact on other institutes in the sub-degree sector, through dissemination of results and sharing of experience at the end, and during the project period.

The estimated fund for the project amounts to \$1,654,000. It will mainly be used in the following areas: (1) recruitment of a programmer, a project officer and a liaison officer; (2) acquisition of software and hardware items for the selected LMS and the student feedback system; (3) consultancy and staff development activities on OBTL, QA, teaching and learning theories and usage of the selected LMS; and (4) other activities such as interviews and focus groups with students, and organization of a one-day symposium for other sub-degree providers. The College will furnish \$645,000 of this project.

B. Project Objectives

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

For institutes in the sub-degree sector like Caritas Francis Hsu College (CFHC) and Caritas Bianchi College of Careers (CBCC), the promotion of an outcome-based approach to teaching and learning, the appropriate employment of information and communication technology (ICT) in the related activities, and the cultivation of students' attitudes and skills for "learning to learn" are important issues, and it is highly desirable for these issues to be addressed as an integrative whole. With this in mind, the LOBSTERS project aims to enable CFHC and CBCC to:

- practise outcome-based teaching and learning (OBTL) in the design, development and delivery of their sub-degree programmes (and their degree programmes in future);
- conduct teaching and learning activities in a manner that facilitates students' development of a rich set of regulation strategies, thus providing appropriate scaffolds for students' transition from external regulation to self-regulation and co-regulation in their learning; and
- develop an institute-wide and ICT-rich learning environment to support the above activities, based on a Learning Management System (LMS) such as the WebCT or the Blackboard, and other appropriate e-learning facilities.

The LOBSTERS will also contribute to the cultivation of a scholarship of teaching and learning in CFHC and CBCC, its outcomes and deliverables will facilitate academic staff of the two colleges to develop discipline-specific pedagogies and learning materials that are OBTL-oriented and ICT-based, and pursue their own teaching-related projects using the LOBSTERS as a general platform. As part of the project, a feedback system to collect evidence on students' achievement of learning outcomes and development of regulation strategies will also be developed, and be added to the quality assurance (QA) system of the two colleges as a means to promote a quality culture that is research-informed, evidence-based and enhancement-led.

While the various experiences gained by CFHC and CBCC and the findings of the project will have direct impact on the teaching and learning of the two colleges, it is also expected that through staff development seminars and workshops that are open to public participation during the project period, a one-day symposium by end of the project, the guidebook on the LOBSTERS approach and possible publications of results from the LOBSTERS and its associated projects, these experiences and findings can be shared with other institutes in the sub-degree sector of Hong Kong, and have positive influences on their teaching and learning.

Through the achievement of the above-mentioned objectives, we hope that the LOBSTERS project can serve as a major vehicle at CFHC and CBCC to improve students' learning experiences and contribute to staff development in areas concerning OBTL, LMS, QA and theories of teaching and learning in general. Through sharing of experiences and findings with the other institutes, the project can also contribute to the promotion of educational quality in the sub-degree sector that is an important area of public concern, and to the appropriate alignment of teaching and learning practices between the sub-degree and the degree sectors, amid the gradual implementation of the new "3-3-4" academic structure.

C. Outcomes and Deliverables of Project

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

Upon completion of the LOBSTERS project, it is expected that the following items will be developed:

For Caritas Francis Hsu College (CFHC) and Caritas Bianchi College of Careers (CBCC):

- A set of revised syllabuses for the sub-degree programmes and learning materials for their courses that are based on the LOBSTERS approach, with teaching and learning of the courses being OBTL-oriented, and emphasis of programme delivery being placed not only on subject knowledge but also on students' generic capabilities, especially those related to the regulation of students' learning
- The employment of an institute-wide and ICT-rich learning environment to facilitate the colleges' teaching and learning activities and the development of students' regulation strategies for their learning
- As part of the colleges' QA system, the development of a feedback system to collect evidence on students' achievement of learning outcomes and development of regulation strategies, via both qualitative and quantitative means, to inform the teaching and learning processes and the internal QA practices
- The cultivation of an approach to teaching and learning that is OBTL-oriented and ICT-based, and the promotion of learning to learn (mainly via the students' development of a rich set of regulation strategies) and evidence-based QA (mainly via the proposed feedback system on students' achievement of learning outcomes and development of regulation strategies)

For the sub-degree sector:

- Guidebook on the LOBSTERS approach to programme design, development and delivery for the reference of other institutes in the sub-degree sector
- A one-day symposium by end of the project to share with other institutes in the sector the experiences gained by CFHC and CBCC as well as the findings of the project

Other possible scholarly outputs:

- Staff development seminars and workshops on OBTL, QA, teaching and learning theories as well as usage of the selected LMS and other e-learning facilities (e.g. hand-held computing devices) which are conducted at CFHC and CBCC during the project period and which can, as deemed appropriate, also be open to public participation
- Findings of the LOBSTERS project which may be publishable in local and/or international journals

It is also possible for the LOBSTERS to serve as an overarching project from which other projects are spawned. These projects can be based on the pedagogies and learning materials developed by academic staff of CFHC and CBCC who are involved in the LOBSTERS project, and the findings of these spawned discipline-specific projects may also be publishable in local and/or international journals. During the project period, CFHC and CBCC are expected to have about 2,000 students and more than 100 academic and non-academic staff, they are the primary beneficiaries of the projects. With the sharing of experiences and findings of the LOBSTERS and its associated projects with other institutes in the sub-degree sector, the final number of beneficiaries will be much more than the stated figures.

D. Implementation Details

At present, Caritas Francis Hsu College (CFHC) and Caritas Bianchi College of Careers (CBCC) have a total of 13 sub-degree programmes, in the disciplines of business (accounting, corporate management, marketing), computer science, design (fashion design, graphic design, interior architecture), hospitality management (hotel, tourism), language (translation and interpretation) and social sciences (social work, human services). It is expected that by end of December 2012 (i.e. the project completion time), at least two more sub-degree programmes will be developed. The LOBSTERS project aims to adopt an OBTL approach to the design, development and delivery of these programmes, establish an institute-wide learning management system to facilitate the programmes' teaching and learning, and encourage the development of ICT-based learning materials and the design of pedagogies to improve students' learning experiences, with particular attention to the cultivation of students' regulation strategies for learning. The involved programmes represent a wide spectrum of disciplinary areas (and as a result different programme objectives, structures, learning outcomes, as well as other programme design and pedagogical issues), which can promote the exchange of ideas and experiences among staff members of the two colleges, as well as the sharing of these results with other institutes in the sub-degree sector.

A dedicated project team comprising the senior management and academics of CFHC and CBCC will be set up in September 2010 to plan for the details of the project, oversee its development, and coordinate the implementation of its component systems as well as the staff development activities encompassing them. The team will be supported by the advice and external expertise of a consultant, as well as a programme, a project officer and a liaison officer. Section H below highlights the key personnel involved in the project.

Staff development is a key issue to the success of the LOBSTERS project. While the project has various tangible outcomes and deliverables (cf. Section C above), intangible outcomes in terms of the expertise and competencies developed by staff members of the two colleges are also invaluable. During the project period, CFHC and CBCC will organize four series of seminars and workshops, on selected topics in the areas of OBTL, QA, teaching and learning theories as well as usage of the LMS and other e-learning facilities. The selection of seminar/workshop topics will be aligned with the progress of the project and, as mentioned above, they can be open to public participation when deemed appropriate.

A set of major project deliverables comprises the revised syllabuses and related documents for the current sub-degree programmes of the two colleges (as well as those for the new programmes to be developed in the said period). It is noteworthy that with the expected announcement of the new AD/HD Common Descriptors in 2010, CFHC and CBCC plan to conduct within the next two years major revisions to all their extant sub-degree programmes, to design at least two more new sub-degree programmes, and subject these new / extant programmes to validation / revalidation by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ). This plan of the two colleges for programme design, revision and accreditation is closely aligned with the LOBSTERS project, with their targeted date of completion both set at 31 December 2012.

Another set of major project deliverables comprises the establishment of the LMS, and on top of it the development of ICT-based learning materials for the delivery of various courses. In this regard, it is targeted that by end of the project, at least 50% of the courses at CFHC and CBCC will be supported by ICT-based learning materials, thus providing various opportunities to encourage more self-directed learning and after-class discussion by students, scaffolding students' transition from external regulation to self-regulation and co-regulation in their learning.

The LOBSTERS is also expected to encourage the pursuit of discipline-specific, teaching-related projects by academic staff members of the two colleges. Besides the possible publication of findings from the LOBSTERS and its related projects in local and/or international journals, the LOBSTERS approach will be documented in its guidebook and the experiences and findings will be shared with other sub-degree providers via a one-day symposium by end of the project.

E. Implementation Schedule <i>(Please extend this table if necessary.)</i>		
Estimated start date of project:		<u>1 September 2010</u>
Action <i>(please indicate key milestones)</i>	Timeframe	Cashflow Requirement
<ul style="list-style-type: none"> ● Recruitment of programmer, project officer and liaison officer ● Appointment of consultant ● Selection of target platform for the learning management system (LMS; Key Milestone 1) ● Acquisition of hardware and software items for the project ● Conduct of staff development seminars and workshops (series #1; Key Milestone 2) ● Review of extant sub-degree programmes of CFHC and CBCC (to prepare for revision into OBTL-oriented curricula) ● Pilot development of ICT-based learning materials on the LMS for courses selected from extant sub-degree programmes ● Design of questionnaires for collecting student feedback on achievement of (generic) learning outcomes and development of regulation strategies for learning 	Sep 2010 – Feb 2011 (6 months)	647,000
<ul style="list-style-type: none"> ● Conduct of staff development seminars and workshops (series #2; Key Milestone 3) ● Completion of review of extant sub-degree programmes (Key Milestone 4) ● Completion of evaluation of pilot development of ICT-based learning materials for selected courses (Key Milestone 5) ● Completion of pilot test of questionnaires for collection of student feedback (Key Milestone 6) ● Adoption of the OBTL approach in the revision of extant sub-degree programmes (and the design of new programmes), and the teaching and learning of courses offered in the 2011-12 academic year ● Promotion of using the LMS in course delivery to all academic departments of the two colleges, with a target to achieve by end of project at least 50% of all courses employing ICT-based learning materials in their teaching 	Mar 2011 – Aug 2011 (6 months)	277,000

<ul style="list-style-type: none"> ● Conduct of staff development seminars and workshops (series #3; <i>Key Milestone 7</i>) ● Completion of OBTL-oriented curricula and related documents for new / extant sub-degree programmes for their validation / re-validation by the HKCAAVQ (<i>Key Milestone 8</i>) ● (The first) institute-wide administration of questionnaires to collect student feedback on learning experiences affected by the project (<i>Key Milestone 9</i>) ● Conduct of focus groups and interviews with students to complement the questionnaires in the collection of student feedback (<i>Key Milestone 10</i>) ● Preparation of the guidebook for the project 	Sept 2011 – Feb 2012 (6 months)	17,500
<ul style="list-style-type: none"> ● Conduct of staff development seminars and workshops (series #4; <i>Key Milestone 11</i>) ● Review and report on the use of ICT-based learning materials in course delivery of the two colleges (<i>Key Milestone 12</i>) ● Review and report on the student feedback of learning experiences affected by the project collected via questionnaires, focus groups and interviews (<i>Key Milestone 13</i>) ● Completion of the guidebook for the project (<i>Key Milestone 14</i>) ● Completion of preparation work for the one-day symposium for sharing of experiences and findings (to be conducted by end of 2012; <i>Key Milestone 15</i>) 	Mar 2012 - Aug 2012 (6 months)	67,500
<ul style="list-style-type: none"> ● Conduct the one-day symposium for sharing of experiences and findings of the LOBSTERS project 	Sept 2012 – Dec 2012 (4 months)	0
	Total	1,009,000

Estimated completion date of project:

31 December 2012

F. Project Budget						
Projected Expenditure <i>(Please provide detailed breakdown under each item)</i>	Amount in HK\$					
	Year 1	Year 2				Total
a. Manpower:	882,000	252,000				1,134,000 <i>(Amount to be borne by the College: 630,000)</i>
b. Equipment / Facilities:	370,000					370,000
c. Services:	10,000	10,000				20,000
d. General Expenses	55,000	25,000				80,000 <i>(Amount to be borne by the College: 15,000)</i>
e. Others (e.g. auditor's fee):	-	50,000				50,000
Total Expenditure :	1,317,000	337,000				1,654,000 <i>(Amount to be borne by the College: 645,000)</i>
Projected Income	Amount in HK\$					
	Year 1	Year 2				Total
a. (e.g. fees received)						0
b.						0
c.						0
Total Income :	0	0				0
Sources of Funding						
a.	Amount of grant sought under this application: HK\$1,009,000					
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>The Instructional Designer of the QEGS Project – Social Communication Networking and Multimedia Lab for Excellence in Teaching and Learning of CBCC will also take up the duty of Project Officer (i.e. HK\$504,000) in this Project. The College will also support the recruitment of Liaison Officer (HK\$126,000)</u>					
(ii)	<u>Video shooting and recording will be supported by the QEGS Project – Online Advising Support and Interactive Study System (OASISS) (HK\$15,000).</u>					
(iii)	_____					
...	_____					

G. Monitoring and Self-evaluation Mechanism

A project team will be set up to ensure the smooth implementation of the whole project, which will be closely monitored by the senior management group of the two colleges, with requirement for the team to report progress periodically. There will also be regular project check-ups and technical check-ups throughout the project. Moreover, the production of some deliverables from the project, such as the revised syllabuses and learning materials for sub-degree programmes, is in fact aligned with the two colleges' plan to validate / re-validate their sub-degree programmes in accordance with the new AD/HD Common Descriptors, which should be conducted before August 2012 (i.e. the project completion time). From time to time the two colleges will also collect feedback from students (as well as the staff involved in the project), both to inform systems implementation and to serve as another means for monitoring and self-evaluation. The plan to produce a guidebook and conduct a one-day symposium to share experiences and findings by end of the project will also motivate the project team to achieve milestones of the project in the light of the planned schedule.

H. Management Support and Key Personnel Involved

The following staff members will oversee the progress of the project:

- ◆ Vice-President (Research / Academic)
- ◆ Dean of Caritas Francis Hsu College

Management and other support will also be provided by various staff members of the two colleges, including:

- ◆ College President
- ◆ Vice-President (Resources & Finance)
- ◆ Dean of Caritas Bianchi College of Careers
- ◆ Head, Department of Computer Science
- ◆ Head, Information Technology Services Centre (ITSC)
- ◆ Consultant (whose employment is supported by the project)
- ◆ Programmer (whose employment is supported by the project)
- ◆ Project Officer (duties to be shared by the *QEGS Project – Social Communication Networking and Multimedia Lab for Excellence in Teaching and Learning*)
- ◆ Liaison Officer (support by the College)

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

Nil

III Other information

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

Upon completion of the project, the College will continue to manage the established LMS, and conduct staff development seminars and workshops on issues related to OBTL, QA, LMS as well as teaching and learning in general. We are committed to absorbing the recurrent expenditure thereafter.

2 Preparatory work done (*If any*)

Initial ideas on outcome-based teaching and learning have been introduced to staff members of Caritas Francis Hsu College (CFHC) and Caritas Bianchi College of Careers (CBCC) through seminars and workshops since the past two academic years. Some staff members of the two colleges have gained preliminary experience in using learning management system through the WebTL (web-based teaching and learning), a simple platform self-developed by CFHC. Prototypes of monitoring systems to collect students' feedback on their learning are now being developed.

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

Both Caritas Francis Hsu College (CFHC) and Caritas Bianchi College of Careers (CBCC) have experience in organizing projects that are funded by the Quality Enhancement Grant Scheme (QEGS) and other sources of financial support. In regard to projects supported by the QEGS, CFHC is now developing the Online Advising Support and Interactive Study System (OASISS), and CBCC is now developing an e-assessment system for supporting students' study in English and Putonghua.

Via the above-mentioned WebTL system self-developed by CFHC, various academic staff members of the two colleges have started developing ICT-based learning materials for their teaching. The person-in-charge of the LOBSTERS project has previous experience in designing monitoring systems to collect students' feedback on their learning. Results have been disseminated in various conferences (manuscripts available upon request).

It is planned that by the end of the LOBSTERS project, a one-day symposium will be organized to disseminate project findings and share experiences with other post-secondary education institutes. In this regard, it is worth mentioning that CFHC and CBCC have accumulated substantial experience in organizing conferences and symposia, as they have been co-organizers of conferences like *the International Conference on ICT in Teaching and Learning* and *the International Conference on Hybrid Learning* which are conducted annually.