II	Project Information

Project Title (in English)	Project Title (in Chinese)
An Outcome-based Approach to Curriculum Development in Associate Degree Programmes	以成效爲本的方法評估和檢視副學士的課程發展

A. Project Summary

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

The project aims at reviewing and developing Associate Degree curriculum through an Outcome-based approach, in response to the paradigm shift that has taken place in tertiary education internationally and locally in recent years. We believe that it is essential for self-financed sub-degree providers to also espouse the shift and implement the approach in order to align and benchmark with local tertiary institutes, which most of them are our key articulation partners.

Through piloting an Outcome-based Approach to curriculum development in selected programmes at the College, the experience and expertise gained can meet the objectives of demonstrating graduates' quality to our stakeholders; making evident accountability to the public and last but not least improving students' learning experience during their stay with our College. In sum, the project's findings will have direct and initial impact **on the funded institute**, where the experience and establishment of assessment and quality assurance mechanisms documented are ready for future adoption by other programmes in the College. Whilst it is expected that there will be an indirect and gradual impact on **other institutes alike** once dissemination of results or sharing of experience has been properly conducted at the final stage of the project. And regardless of whichever type of impact mentioned, **sub-degree students** who study programmes which can demonstrate ever-enhancing quality will be the ultimate beneficiaries.

Three Associate Degree Programmes are selected from each of the Academic Division of the Hong Kong Community College, namely Marketing (Division of Business), Engineering (Division of Science and Technology) and Sociology and Culture (Division of Communication and Social Sciences). These programmes are chosen to reflect diverse disciplinary nature and vocational demand, hence the programme structures, programme outcomes as well as curriculum. The three programme leaders alongside the project principle investigator will therefore form a project panel to steer the implementation of an Outcome-based Approach in developing their corresponding curriculum by going through the following steps: 1) Review existing learning outcomes through the development of a new "fuzzy inference system" and focus group interviews with various stakeholders; 2) Identify or design evidence to measure students' learning outcomes; 3) Develop a rolling timeline for evidence collection for specific programme learning outcomes; 4) Analyze and interpret the evidence with consultant's advice; 5) Evaluate existing curriculum as informed by the evidence and propose change with consultant's input.

The funding of the project will be used in three major areas: 1) recruitment of a Project Officer who can provide support on evidence management and analysis; 2) consultancy fee for an overseas consultant to give a critical eye and recommendations on the implementation process; 3) hosting a one-day symposium on good OBA practices sharing for institutes offering sub-degree programmes. To summarize, the project seeks an amount of $**1,337,000** to materialize and operationalize the abovementioned plan.

B.	Project Objectives

Background:

With a shift from a teacher-oriented to a learning-oriented paradigm of learning and teaching, in conjunction with this era of evidence and accountability in tertiary education, the University Grants Committee (UGC) has echoed the wave and promoted the use of an Outcome-based approach to learning and teaching since 2005. The importance of such commitment has been further strengthened by the fact that future quality auditing of UGC-funded institutes will be conducted with reference to an Outcome-based Approach.

Objectives of the current project:

In a nutshell, OBE involves an *active cycle of planning, implementing and reviewing* at different levels of learning and teaching. The use of such approach is characterized by its cyclical, evidence-based, ever-improving nature. **These characteristics give us compelling reasons, despite our self-financed status, to espouse as well as to start implementing an OBE approach in developing and reviewing our curriculum in order to achieve the following three major objectives：**

1) To demonstrate the quality of our graduates to key stakeholders: In response to the public outcry and uncertainty of Associate Degree providers' quality, it is NOT ONLY important for us to demonstrate the resources and services we are committed to provide but also to be able to show the quality of graduates that our quality programmes and extra-curricular activities help nurture. The latter is especially meaningful for stakeholders to make decisions and it can only be done if an institute can commit itself to an Outcome-based Approach to curriculum development.

2) To make evident public accountability: While it is understood that HKCC as well as other self-financed sub-degree providers will not be included in the coming round of UGC's quality audit exercise, there is still a need for us, as a sector, to benchmark our practices as well as standards in such a way to align with future articulation partners, of which mostly are the UGC-funded institutes. Furthermore, it will be to our benefit to use the Outcome-based Approach to demonstrate quality, drive quality improvements and address the public's concerns over the quality of self-financed sub-degree programmes in Hong Kong.

3) To improve student learning via systematic curriculum development: The identification of outcomes is a starting point for educators to plan the process, then both the ends (outcomes) and the means (teaching and learning process) as well as their alignment will be reviewed and reflected upon with the use of a set of meaningful and objective evidence collected. The ultimate purpose of using an OBA to review academic curriculum is therefore obvious － to improve student learning.

Through the achievement of the above objectives, we hope we can **address the public's concerns about self-financed sub-degree quality; as well as transfer the experience, skills and expertise gathered in this project to other programmes offered by our institute and other self-financed institutes, in such a way the quality of the sector can be further enhanced and assured in the long-run.**

C.   Outcomes and Deliverables of Project

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

For the college:
➤ College-wide dissemination of results to staff members and students who have participated in the project.
➤ Develop an expert system for inferring level achieved by students for programme-specific learning outcomes

For the sector of sub-degree providers:
➤ Modified and validated instruments (for indirect measurement of generic learning outcomes) for institutes alike to adopt
➤ Guidebook on an Outcome-based Approach to Curriculum Development at sub-degree level
➤ One-day symposium to share the experience and project findings of an Outcome-based Approach to Curriculum Development for all self-financed sub-degree providers in Hong Kong.

Possible scholarly output:
➤ Publication of findings in the use of an Outcome-based Approach to Curriculum Development in local or international refereed- journal(s).

Upon the dissemination of the experience of the project, it is expected to have the following estimated number of beneficiaries:

➤ Number of academic staff at HKCC: 160
➤ Number of non-academic staff at HKCC: 50
➤ Number of students at HKCC: 3,000 per cohort
➤ Number of academic staff in the sub-degree sector: 600
➤ Number of local institutes as articulation partners: 8

A total of 3 Associate Degree programmes at HKCC have been selected to participate in this project, one from the Division of Business (Marketing), one from Division of Science and Technology (Engineering) and one from Division of Communication and Social Sciences (Sociology and Culture).   These programmes are chosen to reflect the widest disciplinary nature and vocational demand, and hence differing programme structure, programme curriculum and programme learning outcomes possible, in order to promote the generalizability and transferability of the current experience.

A "project panel" is therefore formed, which consists of 3 project co-investigators who are the programme leaders of the 3 AD programmes selected to participate in the project, alongside the principle investigator.   The role of the "project panel" is to steer the implementation of the following steps involved in the project.   At one point, an overseas consultant will be brought in to give advice on the implementation of the project.

The development and refinement of a curriculum with the use of an Outcome-based Approach will be conducted in each of the selected programme by going through the following steps:

1) **Review existing learning outcomes:** Existing programme documents at HKCC were written in light of the OBA since the last validation exercise, which took place from a span of 2 to 3 years before (for different programmes).   Therefore, a review of these documentations can inform us of the direction as well as aspects of refinements that should be made.   Specifically, the review will focus on two aspects, a) The sensitivity of programme outcomes to stakeholders' needs will be evaluated by conducting focus groups with various stakeholders (students, alumni and articulation partners); and b) The alignment of mapping between programme outcomes and subject learning outcomes will be reviewed by applying a newly designed "fuzzy inference system". Similar line of review can be applied to review generic learning outcomes with the input provided by the General Education Committee, which oversees General Education offerings and its associate quality at the College.

2) **Identify and design evidence that is needed to infer on students' attainment of programme-specific and generic learning outcomes:**   In each programme that participates in the project, course-embedded assessments and their associate rubrics will be identified to see if these artifacts can serve sufficiently to measure some of programme-specific and generic learning outcomes.   Furthermore, indirect measurement such as self-report questionnaires will be administered to help triangulate the content as well as the quality of feedback obtained from direct measures.   In circumstances where appropriate evidence cannot be found in place, the project team will initiate and involve academic staff members to design new course-embedded

assessments as well as questionnaires in order to cater for the need of measuring appropriate learning outcomes in the programme.

3) Develop timeline for collection of data for programme-specific learning outcome: The project team has to work out a feasible plan for data collection, as it is not expected that all the evidence has to be collected in one academic year, while a rolling-plan for data collection is preferred.

4) Consolidate and analyze data collected: Multiple sources of data, both qualitative and quantitative, are collected and analyzed to see if converging trends and patterns can be derived.

5) Propose changes to the curriculum as informed by the evidence collected: Information and evidence collected from step 1) to 4) will be used to inform concrete and specific changes of curriculum of programme in one of the following aspects: a) content of a subject; b) teaching and learning method used in a subject; c) assessment methods used in a subject; d) subject intended learning outcomes; e) programme-specific learning outcomes; f) curriculum map of programme and g) addition or replacement of subject.

A Consultant will be invited on board to step 4) to ensure that the nature and amount of data collected are sufficient and appropriate for the purpose. Furthermore, the consultant will provide solid advice on both changes that can be made in the curriculum for the 3 programmes piloted in the project, as well as establish a mechanism of using OBA as quality assurance in general.

Action *(please indicate key milestones)*	Timeframe	Cash-flow Requirement
Preparation: • Recruit Project Officer • Develop effective timeline for data collection • Develop a "Fuzzy Inference System" for programme review • Identify or design evidence to measure programme learning outcomes	2009 Sept to 2010 End of Feb	**$222,500**
Collection of evidence: • Solicit comments from stakeholders (graduates, Year 2 students, articulation partners and employers) by using interviews and focus groups • Trial "Fuzzy Inference System" for programme review	2010 Mar to 2010 end of Aug	**$132,300**
Collect of evidence (con't): • Collect data by using indirect measurements in accordance to the above planned timeline for cohort 2010 (freshmen) and cohort 2009 (Year 2) • Analyze transcribed data from focus group • Implement "Fuzzy Inference System" for programme refinement	2010 Sept to 2011 End of Feb	**$134,300**
Analysis and interpretation of evidence: • Analyze data, integrate findings and generate a preliminary report and evidences for consultancy • Seek consultancy • Generate consultancy report for the way forward	2011 Mar to 2011 End of Aug	**$382,300**
Round-up and review: • Recruitment of Project Assistant for symposium coordination • Revise curriculum as informed by evidence collected and comments provided by consultant • Disseminate results internally	2011 Sept to 2012 End of Feb	**$228,800**

Dissemination to stakeholders: ● Coordination and liaison for symposium ● Host one-day symposium ● Prepare manuscript for publication	2012 Mar to 2012 End of Aug	**$236,800**

Estimated completion date of project: **August 2012**

F.	**Project Budget**					

Projected Expenditure *(Please provide detailed breakdown under each item)*	Amount in HK$					
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
a. Manpower: 1) Project Officer at Master-degree Level (3-year) 2) Liaison Officer at Degree-level (1 Year)	Salary $21,000x 12 + MPF = $264,600	Salary $21,000x 12 + MPF = $264,600	Salary $21,000x 12 + MPF = $264,600 Salary $15,000x 12+MPF = $189,000			**$982,800**
b. Equipment / Facilities: Computer, Software: Microsoft Office, SPSS, Vivo, Matlab	$10,000+$4,000 + $4,000+$4,000 + $68,200 = $90,200	$2,000 license renewal	$2,000 license renewal			**$94,200**
c. Services: Consultancy Fee		$250,000				**$250,000**
d. Others (e.g. auditor's fee): Finance and editorial fees			$5,000 +$5,000= $10,000			**$10,000**
Total Expenditure :	**$354,800**	**$516,600**	**$465,600**			**$1,337,000**

Projected Income	Amount in HK$					
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
a. (e.g. fees received)						
b.						
c.						
Total Income :						

Sources of Funding

a.   Amount of grant sought under this application: _____ $**1,337,000** _____

b.   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.):

(i)   _____

(ii)   _____

(iii)   _____

…   _____

G.   Monitoring and Self-evaluation Mechanism

- The project panel, which consists of the principle investigator and three co-investigators, will periodically review the project progress and a report will be rendered as required by the government

- The project panel will seek critical input from the Learning and Teaching Quality Committee of the College, a functional committee that oversees Quality Assurance and Learning and Teaching Enhancement matters, from time to time.

- The project panel will update academic staff members (specifically for those who are assigned the duty of programme management / leadership) at the College on the latest development and interim findings

- The project panel will report to and seek input from the Director of the College annually

H.   Management Support and Key Personnel Involved

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

- Director of the College
- Division Heads / Deputy Director of the College
- Chairman of the Learning and Teaching Quality Committee

The following staff members (academic / non-academic) will provide administrative and management support for the project:

- Project Officer x 2
- Programme Leader x 3
- Programme Officer x 3
- Administrative Assistant x 3
- Technical and IT support from the College

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

Not applicable

III	Other information

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

Not applicable

2   Preparatory work done *(If any)*

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

Our College has previous experience in launching projects that are funded by the government. For example, we have successfully applied for government funding from the Quality Education Fund (QEF) and SCOLAR. The project title for QEF in 2005 is 'Integrating into Hong Kong Society and Understanding China's Teaching Initiative for Training South and South-East Asian Teachers and Students Residing in Hong Kong' (Project No.: 0149) and the project was successfully run with government funding. For the funding from SCOLAR, we had organized projects such as 'English Survivor Competition' in 2005/06, 'English Language Camp Leaders Training Programme' in 2006/07, 'Putonghua Tourism Ambassador Training Programme' in 2007/08, and 'Putonghua Training Programme for Student Toursim Ambassadors' in 2008/09.

Furthermore, the person-in-charge of the project has previous experience in running a small project funded internally by the College in the academic year 2004/2005 to examine Students' Learning Experience. Results have been disseminated within College and in a local conference (Manuscript available upon request).