



Ref. No.

For official use only

**Projects on Promoting Outcome-Based Approaches in Student Learning
2007-08
Application for OBA Funding**

PART I: General Information

1. Title

Assessing student generic programme outcomes with final year projects

2. Name(s) of Applicant(s)

Project Leader

Name	Dept	Post	Groupwise	Ext.
Prof Esmond Mok	LSGI	Professor and Associate Head	lsemok@inet.polyu.edu.hk	5953

Team Member(s)

Name	Dept	Post	Groupwise	Ext.
Prof. Albert Chan	BRE	Professor	bsachan@inet.polyu.edu.hk	5814
Mrs. Ann Cheung	BRE	Associate Professor	bsaclo@inet.polyu.edu.hk	5825
Dr. Paul Fox	BRE	Assistant Professor	bsfox@inet.polyu.edu.hk	5828
Ms. Hebe How	BRE	Lecturer	bshebe@inet.polyu.edu.hk	4439
Dr. T.M. Chung	BSE	Associate Professor	betmchung@inet.polyu.edu.hk	5844
Dr. K.T. Chan	BSE	Associate Professor	bektc@inet.polyu.edu.hk	5837
Dr. Joseph Lai	BSE	Lecturer	bejlai@inet.polyu.edu.hk	4697
Prof. S.K. Tang	BSE	Professor	bsektang@inet.polyu.edu.hk	7782
Prof. S.L. Chan	CSE	Professor	ceslchan@inet.polyu.edu.hk	6047
Prof. K.T. Chau	CSE	Chair Professor	cektchau@inet.polyu.edu.hk	6015
Dr. W.T. Hung	CSE	Associate Professor	cewthung@inet.polyu.edu.hk	6044
Dr. Tzung-may Fu	CSE	Assistant Professor		
Dr. A. Sumalee	CSE	Assistant Professor	ceasumal@inet.polyu.edu.hk	34003963
Dr. H.C. Wong	CSE	Associate Professor	cerwong@inet.polyu.edu.hk	6057
Dr. Patrick Lai	EDC	Associate Head	etklai@inet.polyu.edu.hk	6294
Dr. Baki Iz	LSGI	Associate Professor	lshbiz@inet.polyu.edu.hk	5962
Mr. Steve Lam	LSGI	Lecturer	lsiams@inet.polyu.edu.hk	5964

Dr. Lilian Pun	LSGI	Associate Professor	lpun@inet.polyu.edu.hk	5959
Dr. Conrad Tang	LSGI	Associate Professor	ltang@inet.polyu.edu.hk	5963
Mr. Geoffrey Shea	LSGI	Senior Lecturer	lsykshea@inet.polyu.edu.hk	5958
Prof. John Zhi	LSGI	Professor	lswzshi@inet.polyu.edu.hk	5975

3. Total funding requested

4. Expected duration of project: 24 months

Proposed commencement date: 1/7/2008

Expected completion date: 30/6/2010

PART II: DETAILS OF PROPOSAL

1. Project objectives and significance

(What are your objectives in initiating this project? How does it align with institutional goals and targets in implementing outcome-based approaches in student learning?)

Assessing students' generic outcomes is considered one of the functions of the final year projects which are either in form of individual or team work. Collection of the final year project results will subsequently reflect students' generic competence at the time of their graduation. The proposed project aims at designing and developing a mechanism to assess student generic programme outcomes with the final year projects in the four departments within the Faculty of Construction and Land Use. The mechanism includes a series of procedures and methodology as well as materials e.g. outcome attributes, assessment rubrics and evaluation tools etc. The ultimate goal is to enhance and, validly and reliably reflect students' achievement of generic programme outcomes which most of the frontline academic staff have reflected encountering difficulties, but are required by the outcome-based curriculum.

1. To critically review the current practices of assessing student generic programme outcomes with the final year projects in the departments of FCLU
2. To draw up a set of common generic programme outcomes to be assessed in the final year projects and work out the basic attributes required for achieving the outcomes
3. To design and develop an assessment mechanism including an assessment rubric based on the final year project to facilitate students' attainment of generic programme outcomes
4. To communicate the assessment mechanism to relevant stakeholders

5. To trial run the assessment mechanism including assessing students' generic competence in the final year projects with the assessment rubric developed
6. To evaluate the effectiveness of the assessment mechanism and revamp it for future application
7. To disseminate the results of applying the assessment mechanism to parties interested in improving the quality of assessing student generic outcomes

2. Target users

(Who are the intended users of the 'deliverables' of the project – faculties / departments management or programme/subject teams or students?)

Intended users	Deliverables of the project
Faculty frontline academic staff who are involved in assessing the final year projects	Final year project assessment plan, methodology and assessment rubrics specifically for assessing generic programme outcomes
Faculty programme coordinators and peer colleagues who are involved in quality assurance of programmes or final year projects	Final year project evaluation tools re. assessing generic programme outcomes
Faculty and department management who are the policy-makers and give support to the carrying out of new policies	<ul style="list-style-type: none"> – Review report of current practices of assessing generic programme outcomes with the final year projects – Evaluation report of assessing generic programme outcomes with the final year projects
Faculty students who take part in the final year projects	Final year project assessment plan, methodology and assessment rubrics specifically for assessing generic programme outcomes
Members of FCLU and other departments, institutions or universities	<ul style="list-style-type: none"> – Dissemination of findings and practices – Web-based faculty centre re. assessing student generic programme outcomes with the final year projects

If the target users are students, complete the table below:

Programme/ subject code	Programme/subject title	Credit units	Mode of study	Student intake quota per year

Please insert rows in the table if more space is required for additional information.

3. Outcomes and deliverables

(a) Major outcomes and deliverables

(What will be the major outcomes and deliverables of the project?)

	Major outcomes and deliverables with descriptions
(a)	Faculty review report of current practices of assessing generic programme outcomes with the final year projects
(b)	Faculty final year project assessment plan, methodology and assessment rubrics specifically developed for assessing generic programme outcomes
(c)	Faculty evaluation report of assessing student generic programme outcomes with the final year projects and recommendations on the best practice mechanism
(d)	Seminars to disseminate findings and practices
(e)	Web-based faculty centre re. assessing student generic programme outcomes with final year projects

Please insert rows in the table if more space is required for additional information.

(b) Plan for developing and piloting / implementing the deliverables

(Detail the plan and procedures that you will adopt to develop and pilot/ implement the outcomes and deliverables. Also specify the dates of the pilot / implementation period)

It is anticipated that the project will take two years to complete due to the complication of work in developing assessing and evaluating materials relevant to the final year project and liaising with colleagues involved in the project to implement the mechanism and its materials. This will cause huge amount of workload and take time to carry out the project especially in the first year (2008–2009) which is considered (1) the initial stage of the project in which everything designed will be put into practice in the form of pilot work. During the trial-run stage, the materials developed earlier on in the commencement of the project will be further fine-tuned to cater for the need of any unanticipated changes or requirements. The second year (2009-2010) will become (2) the implementation stage of the project in which the revamped assessment mechanism and materials will be adopted and implemented by teachers. In addition, involving students to develop criteria and standards for the final year project with teachers will be built into the implementation plan of the project. It is believed by the proposing team that such additional mechanism will enable students to 'own' the assessment tasks so that these criteria and standards will become their learning goals. The expected target group might be extended to teachers not yet involved in the initial stage such that more teachers will be experiencing the use of the mechanism and its assessment materials.

Period	Events
1/7/08 – 31/7/08	Review the current practices of assessing generic programme outcomes with final year projects in the departments of FCLU
1/8/08 – 31/8/08	Develop an assessment mechanism including an assessment plan, methodology and assessment rubric based on final year projects
1/9/08 – 31/5/09	<ul style="list-style-type: none"> – Trial run the assessment mechanism – Further develop assessment materials and fine-tune the materials already developed – Support frontline academic staff in trial running the assessment mechanism – Prepare evaluation materials – Design a web-based faculty centre re. assessing student generic programme outcomes with the final year project

1/6/09 – 30/6/09	<ul style="list-style-type: none"> – Evaluate the effectiveness of the mechanism of assessing generic programme outcomes – Prepare interim report of the project
1/7/09 – 31/8/09	Revamp the mechanism for future application and assessment materials
1/9/09 - 31/5/10	<ul style="list-style-type: none"> – Implement the revamped mechanism in assessing generic programme outcomes – Support more frontline academic staff in implementing the assessment mechanism – Develop the web-based faculty centre re. assessing student generic programme outcomes with the final year project – Disseminate findings and practices
1/6/10 – 30/6/10	Evaluate the project work and prepare the final project report

Planned pilot / implementation period of the deliverables:

Start Date (dd/mm/yyyy): 1 July 2008

End Date (dd/mm/yyyy): 30 June 2010

4. Dissemination and sharing plan

(How are you going to disseminate and share the outcomes and deliverables of your project?)

Where to disseminate/share outcomes/deliverables of project?	How to disseminate/share outcomes/deliverables of project?
Within departments of FCLU	<ul style="list-style-type: none"> – Work hand-in-hand with colleagues involved and introduce the mechanism to colleagues who are potential users – Disseminate information regarding the mechanism during Teaching Day, Departmental Retreat, staff meetings, and staff and student liaison committee etc. – Web-based faculty centre re. assessing student generic programme outcomes with final year projects
Other departments	<ul style="list-style-type: none"> – Share in seminars/workshops organized by other departments – Web-based faculty centre re. assessing student generic programme outcomes with final year projects
Other universities, local and overseas	<ul style="list-style-type: none"> – Participate and submit papers to conferences held locally and overseas – Web-based faculty centre re. assessing student generic programme outcomes with final year projects

5. Evaluation plan

(How do you plan to evaluate the effectiveness of the project, particularly its impact on the implementation of outcome-based approaches in student learning in the PolyU?)

To evaluate the effectiveness of the project, the future project team will look into the impact of the assessment mechanism on students and teachers as well as students' achievement of the generic programme outcomes in the new practice. Design of the rubrics will also be examined.

1. Subjective views of teachers and students will be solicited through questionnaires specifically designed to examine the impact of the project on them.
2. To evaluate the design of the assessment rubrics, experts will be invited to examine specific areas of the rubrics.
3. Follow-up actions will be carried out to investigate the graduates' generic competence. Information will be collected from employers, alumni, and professional bodies regarding graduates' performance.

6. Impact

(How will the project contribute to the success of the implementation of outcome-based approaches in student learning in the PolyU/ department/ programme/ subject?)

To successfully implement outcomes-based approaches in student learning, the FCLU takes into account student achievement of professional and generic outcomes. However, reports in FCLU L&T Project on OBC have reflected that frontline academic staff encountered difficulties in assessing student generic outcomes because of their lack of knowledge, skills and experience in catering for this aspect specifically. Department heads had been working hard in finding model examples from other institutions or universities so that they could follow, but in vain.

Members of FCLU are now attempting to design and develop a mechanism assessing student achievement of generic programme outcomes in the context of the departments within FCLU. This is considered to be more relevant to the specific situation of the engineering discipline of the PolyU.

Besides, an assessment mechanism is put forth instead of simply a single instrument due to the fact that it is understood that successful implementation of the approach depends not only on the tools but also on many factors and the system in managing the operation of the mechanism. Putting all the various factors in order will favourably benefit the design of a valid and reliable assessment of student achievement of the generic learning outcomes, and hopefully without overwhelming teachers with unnecessary workload which is one of the major concerns of teachers and department heads.

The teachers involve in this project will be pioneers in piloting the suggestions and design of the generic outcomes assessment. Through hands-on experience, teachers are expected to be transformed with a real focus on all-round development of students. As for teachers in FCLU not involved in the project no matter due to whatever reasons, it is hoped that they would be convinced with the results of what have been carried out in the project and subsequently make a change in their attitude towards the possibility of implementing the outcome-based approach in developing student generic competence. Through dissemination of the results of the project, we hope that this would be beneficial to teachers not only in the engineering discipline but other disciplines in the PolyU and the University target of carrying out the outcome-based approach in developing all-round graduates would be more likely to reach.

7. Target date(s) for submission of progress and completion reports

	Planned submission date (mm/yyyy)
1. Progress report <i>(for projects whose duration lasts more than 1 year; to be submitted mid-way through the proposed project period)</i>	6/2009
2. Completion report <i>(to be submitted within 3 months after the project completion date)</i>	9/2010

PART III: BUDGET OF PROPOSAL

***Important Notes**

1. Funding requests for equipment and/ or software will be considered only if:
 - a. the equipment / software is essential to the successful implementation of the project, AND
 - b. it is not available in the department concerned. The Project Leader has the responsibility to check this out.
2. The purchasing policies and procedures of FO must be followed for the procurement of approved items.
3. Funding request for conference attendance will not be considered.

PART IV: DEPARTMENTAL ENDORSEMENT

Endorsement by Chair of FLTC/ DLTC:

Comments on the proposal:

FLTC fully supports this proposal.

Name: W.P. SUBA Signature: [Signature] Date: 20/1/2008
(in block letters)

Project Leader

Name: Prof. Esmond Mok Signature: [Signature]
(in block letters)

Dept: LSGI Date: 30th January, 2008

Endorsement by Dean/ HoD:

Comments on the proposal:

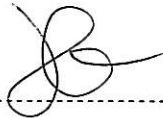
The assessment of generic programme outcomes is very important to the successful implementation of OBC. Very strongly supported.

By endorsing this proposal, I agree that:

1. The proposal suitably addresses the School/Department's needs in promoting and implementing outcome-based approaches in student learning and will be considered as part of the School's/Department's Business Plan.
2. The School/Department will receive a funding as calculated for item (e) in the Budget section which I will use for providing the time release recommended by the project proposers, based on the Total Workload Model, to support them to work effectively on the project.

Name: JIN-GUANG TENG
(in block letters)

Signature: _____



Date: _____

31/1/2008

Please return this form to Miss Miranda Fung, Secretary of Working Group on Outcome-based Education,
c/o Educational Development Centre
by 31 January 2008

OBA Project Proposal – Request for A Supplement to Proposal:**Assessing Student Generic Programme Outcomes with Final Year Projects**

Clarify how the project results may support the enhancement of student achievement of learning outcomes

Project results will provide information on how well the graduating students have developed in the generic outcomes. The results will be disseminated to programme teams for improving/fine-tuning the development path of students' generic outcomes. Project results will also be presented and deliberated in FLTC, and suggested improvements will be conveyed to departments for their consideration.

Specify the co-ordination mechanism among the 22 project members who are from 4 departments

The three-tier hierarchy management system established for the current Faculty L&T project will be adopted. This management system has been proved to be very effective in coordinating members from the four departments. The following is brief description of the management structure:

- Core Team
 - Composing of the Project Leader & Research Personnel
 - Meets every fortnightly
- Executive Committee
 - Composing of the Project Leader & Research Personnel + Sub-Team Leaders from each Department
 - Meets once a month
- Project Team
 - Composing of the Project Leader & Research Personnel + Sub-Team Leaders from each Department + All other Team Members
 - Meets every two months

Consider reducing the budget by establishing synergy among the departments involved

The project team considers that the proposed budget is reasonable, and justification of the budget requirement aligned with the three-tier project management structure is provided in the submission document. The following budget proposal is extracted for your reference. The research personnel will serve four departments.

Senior Project Fellow (x1)

Senior project fellow will provide professional input to steer the development of the project.

Project Fellow (x1)

Project fellow will need to supervise other project personnel, coordinate and liaise with academic departments for development and delivery of project deliverables.

Project Associate (x1)

Project associate will work on data analysis, materials development and production.

Project Assistant (x1)

Project assistant will need to help data collection and develop the project deliverables.

TOTAL: \$ 1,592,550