Outcomes Based Education Steering Group Next Steps in the Implementation of OBE: Piloting Assessment Plans September 2009

The University has agreed a set of graduate attributes (ABC LIVE) and Schools and academic departments have developed provisional statements of intended learning outcomes for their programs. On this basis, we are engaged in piloting the development of an outcomes orientation at the level of courses. By the end of the 2009/10 academic year, the pilot will have included about 80 -100 courses. After this experience, it is expected that general implementation over the period to 2012 can go forward.

In addition to the general alignment of courses and other learning activities to the agreed intended learning outcomes, the implementation of an outcomes-based approach to education at HKUST will require the development of an "assessment plan" designed to measure success in achieving these outcomes.

What is an assessment plan?

A comprehensive assessment plan would be designed to provide evidence the success of the University in enabling students to achieve the desired outcomes/attributes. Assessment at this level does not require that every student is assessed for every desired attribute, or that every course is made a site for evaluation of the undergraduate experience as a whole. While this makes development of an assessment plan a practical project, any viable scheme must address some obvious issues:

- Scope of the evaluation basis of evaluation (activity, year of study, program, student experience), relevant range of learning outcomes
- Evidence to be deployed assessments already embedded in courses, standardized tests for sample groups, students self-report through questionnaires and focus groups
- Integrating evaluations at different levels program, School, University
- Periodicity every three-years, five years, different for different outcomes?
- Role of external evaluation
- Responsible units and resources
- Reporting lines and closing the loop for improvement

Difficulties in implementing an Assessment Plan

The formulation of an assessment plan is made difficult by three sources of complexity:

The range of learning activities that comprise the student experience: students' learning does not take place only through their academic program. In the areas of personal development, citizenship, cross-cultural sensitivity and so on, campus life and the co-curriculum are significant contributors to students' development.

The range of sites where learning occurs: while students' departments are the obvious location for an effort to evaluated overall achievement of "graduateness", Schools, other departments, the Language Center, the Library, SAO, residential halls, and others all contribute to activities relevant to the achievement of desired outcomes.

The range of the potential sources of evidence for the achievement of outcomes, including: assessments embedded in courses; sample data of students' achievement of generic outcomes in standardized tests; and students' self-report of the achievement of outcomes through questionnaires, focus groups.

An additional problem is the transition to a four-year degree. For the three-year degree and for taught postgraduate degrees, students' programs are a viable location for the overall assessment of students' educational experience. For a mature four-year curriculum, this is not obviously the case.

A way forward

The OBE Steering Group does not believe that there is a direct route to an appropriate, well integrated "assessment plan". Not enough is known about the scale and scope of the problem or the capability of different units to contribute to a solution. The best way forward will be to engage units in well focused, pilot projects that would lead to a clearer appreciation of the issues and options for solutions. It is proposed that:

- 1. Each of the main units concerned with delivering learning experiences take up a component of the assessment problem which the unit is equipped to handle:
 - *Academic departments*: all departments will be asked to identify one or two key learning outcomes for its programs related to higher-order thinking skills, typically **problem solving/critical thinking**
 - Schools: at least one key generic outcome of particular importance to the School from the following list: leadership and team work; ethical understanding and personal integrity; cross-cultural sensitivity; fundamental competence in computing and IT or "intellectual breadth" in the relevant discipline foundation.
 - Language Center: communications skills
 - SAO: commitment to the community
 - Library: information literacy
- 2. Programs provide the chief focus for the integration of assessment plans based on agreed program ILOs, both in the development of the plan and in the first-round of implementation.

The projects is expected to go through three stages.

Stage 1: Now - December 2009

- Formation by units of a small **working group** for the learning outcomes under review
- Review of available **assessment rubrics** for the outcomes and need for in-house development of rubrics
- Review of existing arrangements and opportunities to evaluate the agreed outcomes, including direct assessment of students, sample assessment, and students' self-report
- Note **gaps** and means to address the gaps in existing arrangements
- Bring forward **components of an "assessment plan"** for the specified outcome(s) that deploys the known opportunities for assessing learning outcomes and takes stock of the gaps and issues if the plan is to be implemented.

Stage 2: December - January 2010

- Share insights and conclusions from Stage 1
- Look at the issues of **overlap and integration**
- For each program develop a **feasible assessment plans** mobilizing the contributions of other units
- Consider the **impact on students** included in the pilot projects

Stage 3: January - September 2010

- Programs to coordinate the implementation an agreed assessment plan as "proof of concept"
- **Report back** on difficulties and successes
- Provide the University with **guidance for general implementation** of assessment of intended learning outcomes and achievement of graduate attributes

Project Management and Support

The OBE Steering Group will provide general oversight of the project, working through the Schools and programs and taking into account linkage with the on-going piloting of course outcomes.