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Title: More than a paper trail: Developing quality assurance processes that enhance teaching and support student learning

Key words: quality assurance; teaching and learning policy; evidence base; student surveys

Methodology: Mixed methods: Qualitative and quantitative

Abstract:
This paper is set in the context of The Chinese University of Hong Kong (CUHK), a comprehensive research university with a bilingual tradition. The quality assurance system in Hong Kong is explained, as is the way that government policy is enacted at CUHK. We have developed an evidence-based system for monitoring and supporting all our programmes. Evidence comes from a range of sources and programmes are required to be involved in reflective collegial reviews on a regular basis. These reviews lead to action to improve teaching quality and support student learning. The role of the Centre for Learning Enhancement And Research (CLEAR) is central to the University's quality endeavours.

1. Background on Quality in Teaching and Learning in Hong Kong

Hong Kong has recently adopted a system of university quality audits by the Quality Assurance Council (QAC) – a body modeled closed on the Australian Universities Quality Agency; this paper has the backdrop of the recently flurry of 'quality' activity that the QAC has created.

The University Grants Committee (UGC) of Hong Kong is a non-statutory advisory committee responsible for advising the Government of the Special Administrative Region (SAR) of the People's Republic of China on the development and funding needs of higher education institutions (HEIs) in the SAR. There are eight UGC-funded HEIs, seven of which have university status (http://www.ugc.edu.hk/eng/ugc/site/fund_inst.htm). The Quality Group of the UGC has oversight of the funds allocated to enhancing the quality of teaching and learning. (http://www.ugc.edu.hk/eng/ugc/about/term/qg.htm).

Outcomes-based approaches (OBAs) to teaching and learning have received increasing attention in Hong Kong. Table 1 is an annotated timeline of events since the mid-1990s showing a gradual but clearly directed increase in government intervention in ensuring that the Hong Kong HEIs have an OBA that is not merely output-driven but is based on indicators that are recognized as pertaining to student learning. HEIs are increasingly accountable within an OBA framework. The culmination of these more directed government initiatives is the change in Hong Kong's higher education system in 2012 from a three-year normative undergraduate curriculum to a four-year normative curriculum. In 2012 undergraduate university student numbers increase by one third; there will be an intake of students from the 'old' secondary seven-year curriculum alongside an intake of students from the 'new' six-year secondary curriculum. This means that during the years 2012 to 2015 there will be a 'double cohort' of students – half doing a three-year undergraduate degree and half doing a four-year degree. The 'new' curriculum is intended to have an OBA and this undoubtedly will be audited in future QAC audits.

Table 1: Timeline of important quality initiatives in Hong Kong

Year	Initiative
1994	The UGC initiates sector-wide Teaching Development Grants that are still available.
1997	First Teaching and Learning Quality Process Reviews (TLQPRs) at all UGC-funded HEIs. These were *process* reviews and not overtly outcome-driven – see http://www.ugc.edu.hk/eng/ugc/publication/prog/tlqpr/tlqpr.htm
2003	Second round of TLQPRs. Outcomes of good practice from the two rounds of TLQPRs are recorded in Leung et al. (2005).
2005	OBA specifically mentioned as being the direction for higher education in Hong Kong. It was called a 'soft' approach in that it was not linked explicitly to funding, though most HEIs did not believe this was the case.
2006	The Quality Assurance Council (QAC) established; its focus is on teaching and learning and not on whole-of-institutions audits (http://www.ugc.edu.hk/eng/qac/)
2008	First QAC audit (at CUHK) with a clear search for evidence of student learning outcomes (http://www.cuhk.edu.hk/v6/en/teaching/qac.html)
2012	Double cohort and the new (normative) four-year undergraduate curriculum. Universities are receiving considerable funding for the curriculum, infrastructure and recruitment implications of this dramatic change. (http://www.ugc.edu.hk/eng/ugc/about/term/334g.htm)

2. Developing a Quality Assurance Framework for Teaching and Learning at CUHK

This paper is set in the context of The Chinese University of Hong Kong (CUHK). CUHK is a comprehensive research university with a bilingual tradition and a collegiate structure. There

are approximately 10,500 undergraduate students, studying in approximately 50 different programmes. Approximately 90% of undergraduate students are Hong Kong Chinese. Most of the remaining 10% come from Mainland China. There is a small (but growing) number of exchange students. Most of the 2,000 research postgraduate students come from Hong Kong and Mainland China in roughly equal numbers. In addition, there are over 4,000 students in taught postgraduate programmes, a number that is increasing quite rapidly; already there are more than 140 taught postgraduate programmes.

In 2003, the University adopted a Ten-Year Vision Statement (The Chinese University of Hong Kong, 2003) and, in 2006, a Strategic Plan which set the agenda for a concerted effort for excellence, as a leading university in China and the region. CUHK's philosophy and mission is to produce well-rounded graduates well trained in their major studies and, in addition, possessing a range of skills and values appropriate to the 21st century, including a capacity for lifelong learning. Bilingual proficiency, an understanding of Chinese culture and an appreciation of other cultures are core components of the curriculum and designed to prepare our students globally as citizens and leaders.

The best description of the desired outcomes for CUHK graduates can be found in the University's Strategic Plan.

> "The University expects that its graduates should have acquired an appreciation of the values of a broad range of intellectual disciplines as well as general knowledge, and within that wide spectrum, have gained a depth of knowledge within a specialty, not only as an end in itself but also as a vehicle for experience in serious study and enquiry. They should have a high level of bilingual proficiency in Chinese and English, and a basket of skills including numeracy, analytic skills and IT capability appropriate to the modern age, and above all the ability to continue with life-long learning and professional development – in this day and age, that ability will be far more important than factual knowledge acquired during university studies. They should have cultivated a habit of reading widely, learnt to be critical and independent; they should be effective in communication and working in a team. Our students are also expected to have a deep understanding of Chinese culture and with it a sense of national identity and pride; they should also have an appreciation of other cultures, and with that appreciation also a high degree of inter-cultural sensitivity, tolerance and a global perspective. They should have an attitude of compassion, honesty and integrity in relation to self, family and society, and the ability to contribute as citizens and leaders. They should have a sense of purpose, responsibility and commitment in life, a desire to serve, as well as taste in their pursuits."

The Chinese University of Hong Kong Strategic Plan (2006)

Articulate rhetoric is one thing; however, a key question is whether the University has appropriate and effective policies, processes and support structures to ensure that its mission is enacted.

Educational quality literature highlights the centrality of beliefs in the organization of effective quality assurance schemes. Harvey and Knight (1996) argued for quality assurance being a power for transformative change. Freed, Klugman, and Fife (2000) discussed quality as being an element of the culture of universities and described how a culture for academic excellence can be engendered by a holistic implementation of a set of quality principles. In formalizing CUHK's Teaching and Learning policy, members of the Senate Committee on Teaching and Learning (SCTL) took the view that policy should have a quality enhancement perspective and not a quality control one.

In 2005, when the UGC announced its OBA direction, we were already aware at CUHK that initiatives such as a clear line about OBA and an increased attention to monitoring quality were likely to be announced. The 2004 policy document 'Hong Kong higher education: To make a difference, to move with the times' clearly articulated that a stronger line on institutional accountability was to be expected (University Grants Committee, 2004).

CUHK's Teaching and Learning Policy was launched in March 2004 after wide consultation. The document, titled 'The Integrated Framework for Curriculum Development and Review' (Integrated Framework), has as its main objective "to ensure that teachers and programmes engage in reflection about teaching and learning, that such reflection is rooted in evidence and leads to action for improvement, and that incentives be provided for such efforts" (The Chinese University of Hong Kong, Integrated Framework, 2004 & 2006, Section 3.1.1). The Integrated Framework received a commendation in the recent QAC audit of CUHK.

The principles underlying the Integrated Framework have an OBA focus: curriculum elements should align with desired learning outcomes to ensure fitness for purpose. To ensure local adoption and relevance, accepted principles and practices were refined with input from those CUHK academics judged to be the best through being awarded a Vice-Chancellor's Award for Exemplary Teaching. A set of principles for good teaching was derived from interviews with 18 of these teachers (Kember et al., 2006). These teaching principles relate to a curriculum development model (Figure 1) in which student learning needs lead to five key interlocking elements: desired learning outcomes, content, learning activities, assessment and evaluative feedback, which are incorporated into procedures for course development, course review, programme development and programme review. Evaluation or feedback is central as it informs reflection upon practice. Review outcomes impact budget allocation, albeit indirectly.
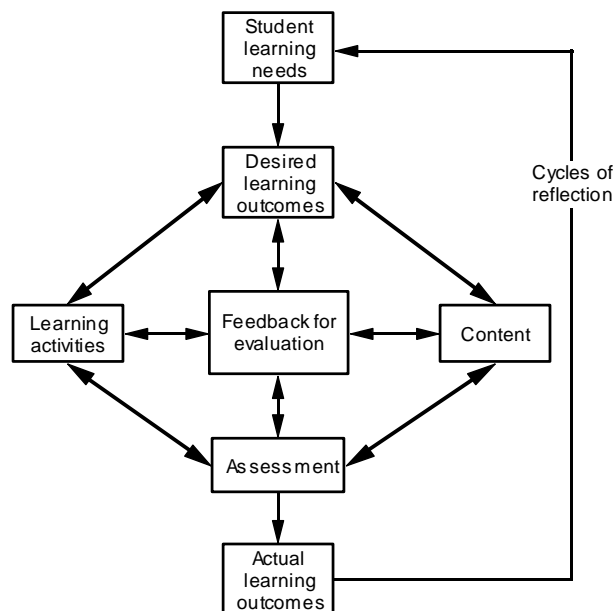

Figure 1: A model of an aligned curriculum (after Biggs, 2003)
that is integral to the Integrated Framework

The Integrated Framework requires courses and programmes to be planned and documented, broadly following a standard template. The ongoing cycles of reflection are captured in action plans which are refined through a series of review and reporting activities, including a brief annual progress report on teaching and learning, a three-year cycle of internal course reviews; and a major review every six years involving a self-evaluation document and review by a panel (appointed by SCTL) that includes the external examiner. Assessment of quality assurance and improvement is made by the panel on the basis of firm evidence. The panel's report leads to an action plan to deal with challenges and improve the quality of teaching and learning within the programme. The overall process is shown in Figure 2. At the undergraduate level, almost all the programmes have been reviewed in the period since 2005. The Integrated Framework also stipulates the requirement for professional development for teaching assistants and for junior teachers who are relatively new to CUHK. There is a version of the Integrated Framework that applies to taught postgraduate programmes and one is being developed for the sub-degree sector (associate degrees and higher diplomas). The focus in this paper will be the undergraduate sector,
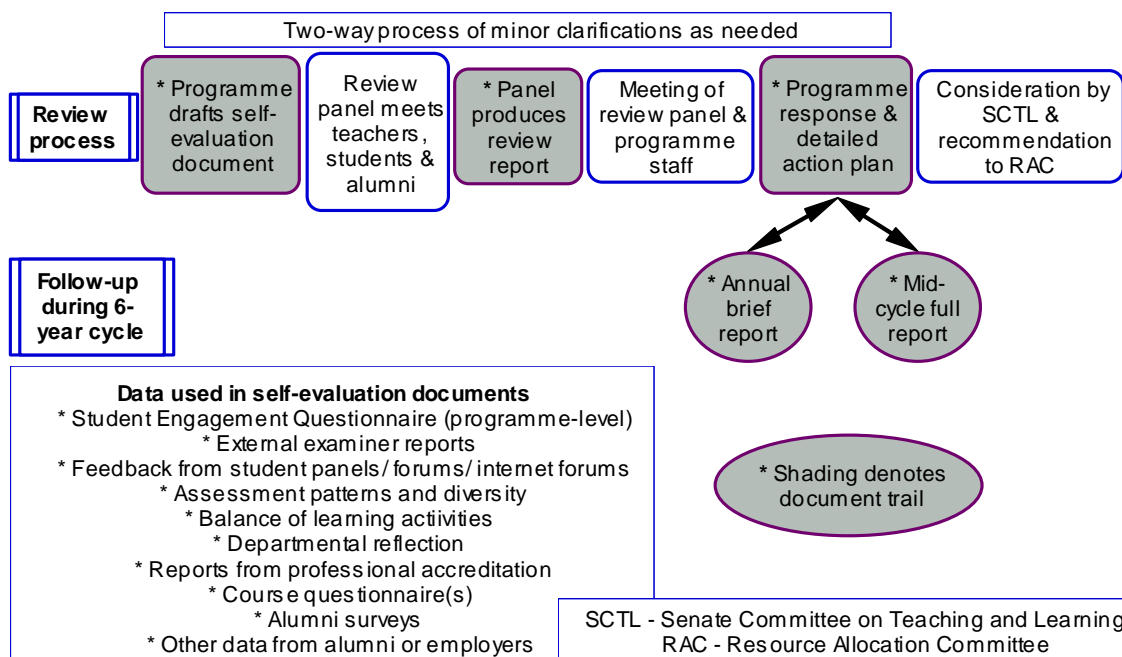
Figure 2: Undergraduate programme review process stipulated by the Integrated Framework

3. The Role of the Centre for Learning Enhancement And Research (CLEAR)

The Centre for Learning Enhancement And Research (CLEAR) (http://www.cuhk.edu.hk/clear/) is a small academic teaching and learning unit. The current establishment is four professors, and five administrative and technical staff. In addition, there is a significant group of researchers funded by UGC grants; numbers vary considerably but there are usually about 12 research staff. A small centre focusing on support for students' learning and language skills (eight staff) has also recently been added as a sub-unit in CLEAR. We also work collaboratively with the University's Information Technology Services Centre (ITSC) to run the eLearning Service (http://www.cuhk.edu.hk/eLearning/) which is shortly to be formalized as the eLearning Unit.

5

CLEAR's mission is to:

- support the mission of the University particularly in its concern for the assurance of high quality in teaching and learning;
- establish a supportive environment of excellence in teaching and learning so as to maximise the potential of both teachers and students; and
- create opportunities for academics to reflect upon their teaching and share their experiences.

Our goals are to:

- promote good teaching (and assessment) practice that facilitates student learning;
- provide professional development opportunities for CUHK teachers;
- enhance student learning environments;
- support rigorous evaluation of curriculum development and teaching and learning practice; and
- conduct research in areas related to teaching and learning in higher education.
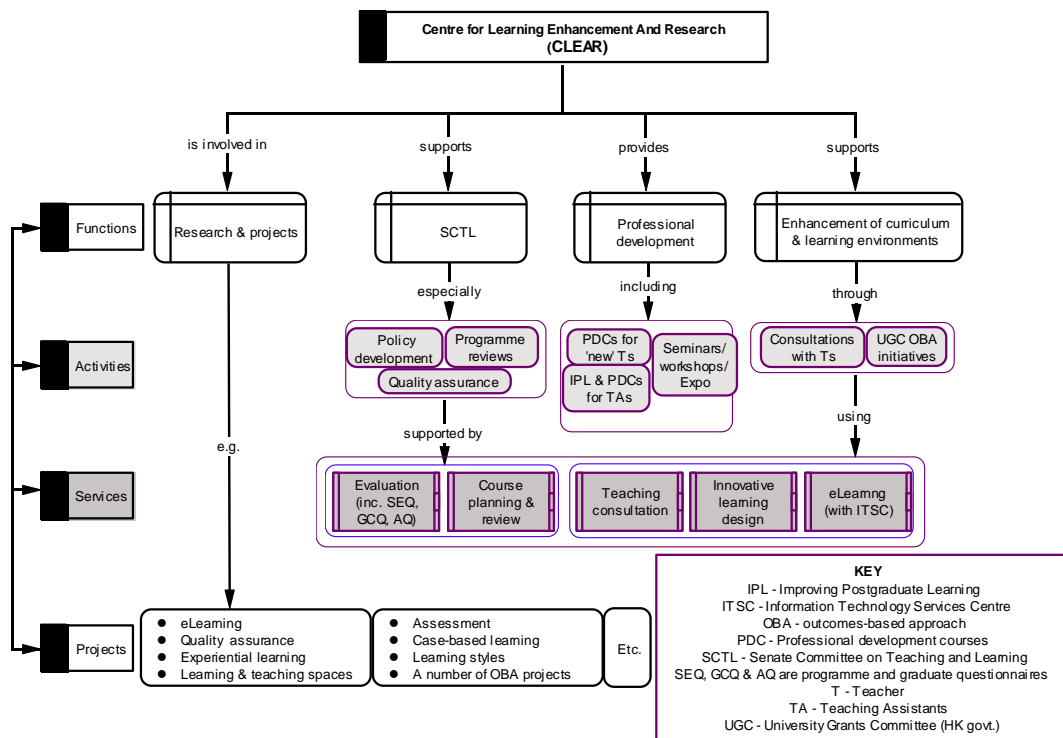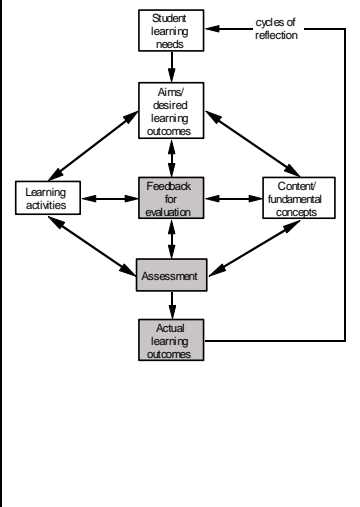
An overview of our work is shown in Figure 3.

Figure 3: Overview of CLEAR's work

Of particular importance to this paper is the work of CLEAR's Evaluation Services and this will be the focus of the next section.

4. Data for Programme Reflection on Quality Matters – CLEAR's Evaluation Services

Table 2 shows the main data sources that exist for key curriculum elements at CUHK.

Table 2: Main data sources to facilitate programmes' reflection on quality

	Element in T&L model	Data available for reflection each year and for developing trends over time
	Feedback for evaluation on programme and course design	Course and Teaching Evaluation (CTE) data on all courses each time the course is run.
		Programme-level survey data collected centrally and discussed with all programmes
		Other forums for student feedback
		Assessment data is important evaluation data
		External examiner's reports in all programmes
		Professional accreditation (where appropriate)
	Assessment	Student performance data on all assignments and examinations
		Examination of assessment patterns for various assessment strategies
	Actual learning outcomes at the end of the programme	Assessment data for performance in final-year projects and other capstone courses
		Programme-level survey data collected centrally and discussed with all programmes, especially graduate and alumni surveys
		Feedback from employers
		Feedback from the profession (where appropriate)
		Alumni feedback

CLEAR's Evaluation Services was reorganized in 2009 and now has key responsibilities for the administration of a number of programme-level surveys that provide feedback to programmes on students' (and alumni's) perceptions about the capabilities they have developed and their perceptions of the teaching and learning environment. For undergraduate programmes these questionnaires are:

- *Student Experience Questionnaire (SEQ)* administered in Year 1 and the final year of undergraduate studies – around March of each year. Tailored versions of the SEQ are possible but are not encouraged as there are already multiple mechanisms for obtaining feedback from undergraduate students, and there is evidence that there is a growing overuse of questionnaires at CUHK. Where possible, online surveys are used, though this may take a few years to achieve.
- *Graduate Capabilities Questionnaire (GCQ)* administered one year post-graduation from undergraduate studies – around June of each year. For the GCQ there is the possibility of a tailored version through an additional section being added to the core GCQ scales. The GCQ administration is conducted online. Having a tailored GCQ should curb the proliferation of graduate surveys that is now occurring. The administration of the GCQ is coordinated with the administration of the graduate employment survey, run by the Office of Student Affairs (OSA). There should be thus one survey administered to early graduates.
- *Alumni Questionnaire (AQ, same items as the GCQ)* to be administered five years post-graduation from undergraduate studies – around November of each year. The first administration was in November 2008. The AQ is not administered in a tailored version. The AQ administration is conducted online.

For each programme the surveys are conducted with the same group of students/ alumni over a time span of eight to ten years. Longitudinal tracking is thus possible. Confidential reports are provided to each programme. Regular institutional research reports can be provided to University administration from aggregated data. Data which identifies any individual programme can only be disseminated with that programme's permission.

The logistics of handling the changed curriculum arrangements in 2012 have been considered in the planning of the administration of the SEQ, GCQ and AQ. Furthermore, due to changes in the arrangements for some programmes in the next year or so (such as more double degrees and double majors, bundled admissions, and the possibility of developing more tailored courses in all years of study), CLEAR needs to provide data every year for all of the undergraduate programmes as our default option. Good longitudinal data can thus be achieved. Academic staff in CLEAR provide a consultation service to programmes for discussing the implications of the data and providing support for the implementation of appropriate teaching and learning enhancements. There is an annual meeting between a professor in CLEAR and each undergraduate programme.

The Evaluation Services in CLEAR provides additional evaluation services, including:
● advice to all CUHK staff on the evaluation of new initiatives and innovations; this may include collaborative projects;
● advice to departments and programmes on how best to establish quality assurance (QA) processes;
● support for qualitative evaluations such as focus groups; and
● support for self-financed programmes (sub-degree and postgraduate), as covered by the University's commitment to quality support for these sectors.
Some evaluation processes are listed at http://www.cuhk.edu.hk/clear/services/evaluation.htm.

The overall plan for the provision of longitudinal data on the student learning experience at CUHK was endorsed by SCTL in November 2008 and is show diagrammatically in Figure 4. Some key scales on the various instruments are summarized in Table 3.
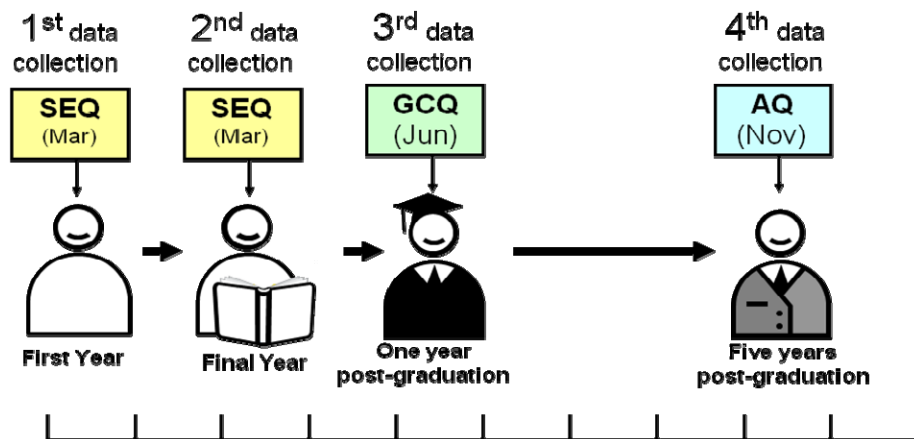

Figure 4: Plan for the provision of longitudinal data on the
student learning experience at CUHK

Table 3: Some key scales on the questionnaires administered by CLEAR's Evaluation Services

Scales	SEQ	GCQ	AQ
Development of capabilities			
Critical thinking	✓	✓	✓
Self-managed learning	✓	✓	✓
Communication skills	✓	✓	✓
Interpersonal skills and groupwork	✓	✓	✓
Creative thinking	✓		
Readiness for employment		✓	✓
Teaching and Learning Environment			
Teaching for understanding	✓		
Feedback to assist learning	✓		
Assessment	✓		
Coherence of curriculum	✓		

5. Cycles of Reflection and Action

At both course and programme level, there are cycles of reflection and action. These cycles are shown in Figure 5. There is support available for enacting the action plans – for example UGC-funded Teaching Development Grants (McNaught, in press) and internal courseware development grants. All grants to support teaching and learning at CUHK are required to have an evaluation plan so that teachers are directed and supported to seek evidence of enhanced student learning.

CLEAR's academic staff are all assigned to particular faculties and departments to act as strategic liaison persons. Besides 'open' seminars and workshops, we offer tailored events in particular departments. We collaborate with individual teachers and often publish our results in journals and conference proceedings.
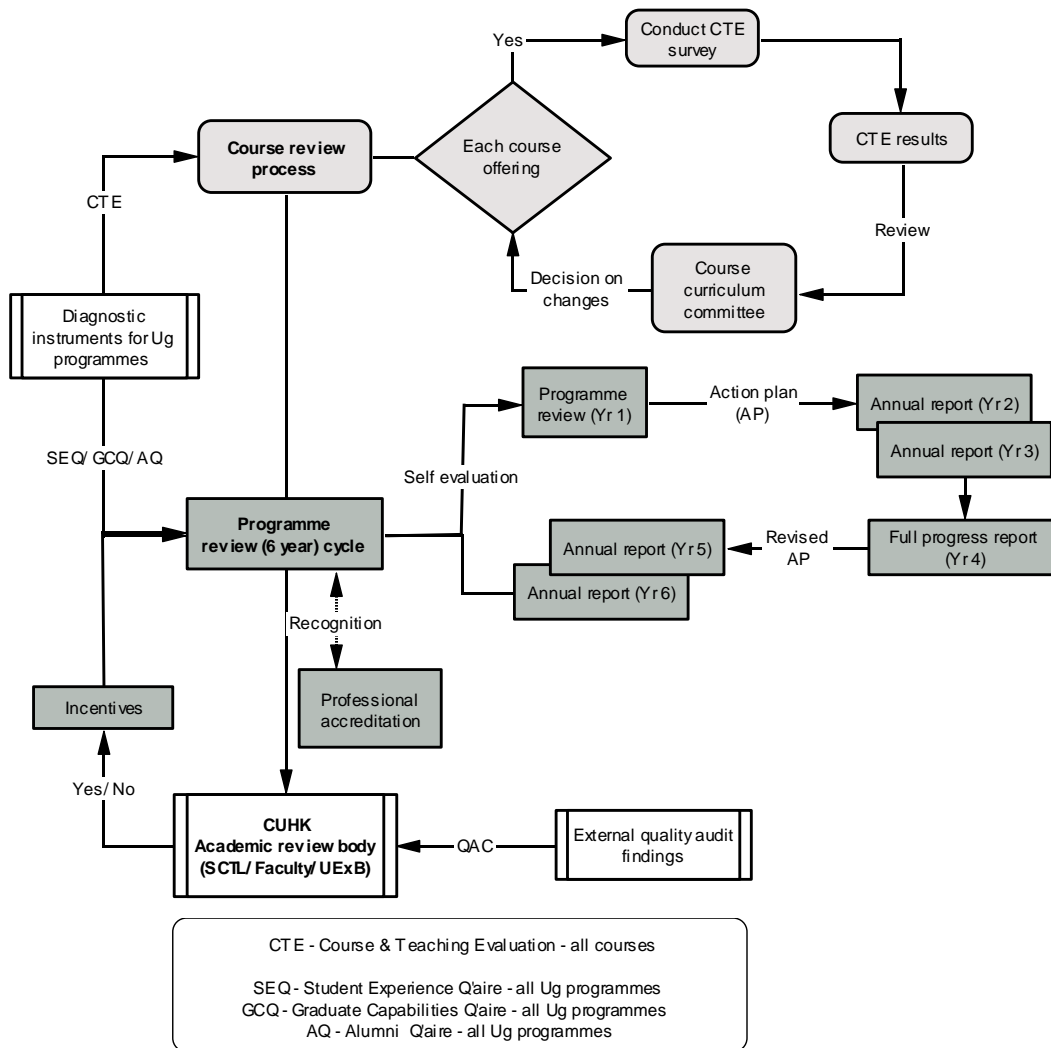
Yes → Conduct CTE survey

Course review process

Each course offering

CTE

CTE results

Review

Diagnostic instruments for Ug programmes

Decision on changes

Course curriculum committee

Programme review (Yr 1)

Action plan (AP)

Annual report (Yr 2)

Annual report (Yr 3)

SEQ/GCQ/AQ

Self evaluation

Programme review (6 year) cycle

Annual report (Yr 5)

Revised AP

Full progress report (Yr 4)

Annual report (Yr 6)

Recognition

Incentives

Professional accreditation

Yes/No

CUHK Academic review body (SCTL/Faculty/UExB)

QAC

External quality audit findings

CTE - Course & Teaching Evaluation - all courses

SEQ - Student Experience Q'aire - all Ug programmes
GCQ - Graduate Capabilities Q'aire - all Ug programmes
AQ - Alumni Q'aire - all Ug programmes

Figure 5: Cycles of reflection and action at both course and programme level

6.   Overcoming Barriers to Successful Change

Of course there are barriers to successful change. The key to successful change management is to maximise the drivers that support change and minimize those that act as inhibitors. A few examples will illustrate how we use this principle.

- Financial incentives: Programmes that can demonstrate excellence get a small increase in the department's one-line budget. Programmes that have significant management problems receive a financial penalty – usually suspended if action is rapid.
- CUHK is a research-intensive university and research grants and publications are important. In 2004 the University altered the criteria for tenure and promotion a few years ago to increase the importance of teaching evidence. Over the two year period 2005–2007, the average teaching performance score of successful applicants was 5.26, and for unsuccessful applicants was 4.88; this is a statistically significant difference.
- Showcasing excellence works. We use our award-winning teachers to demonstrate principles of excellent teaching in action (Kember et al., 2006; Kember & McNaught, 2007). We also have local events where awards are presented to excellent eTeachers (http://www.cuhk.edu.hk/eLearning/expo/).

The commendations we received in the QAC audit in 2008 gave us confidence that our approach is a sound one. The full report can be viewed at http://www.cuhk.edu.hk/v6/en/teaching/qac.html. The recommendations, while not far reaching, affirm the goals we have set for the next few years. In this way cycles of quality enhancement continue with the main beneficiaries being the students at our fine university.

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All in-text URLs accessed on 20 May 2009. The decision to use in-text URLs was made in order to facilitate access to relevant web documentation. This is not strictly APA style but may be more useful.