The next meeting of the Teaching & Learning Committee will be held in the Faculty Meeting Room 155 on Tuesday 8 July 2008 at 2pm. All members are expected to attend or ensure that a representative from the School will attend on their behalf.

1. **MINUTES**
   Confirmation of the minutes of the meeting of the Teaching and Learning Committee held on Friday 20 June 2008.

2. **DECLARATIONS OF POTENTIAL FOR CONFLICT OR PERCEIVED CONFLICT OF INTEREST**
   The Chair invites members to declare interest in relation to any item on the agenda.

3. **ITEMS/BUSINESS IN PROGRESS FOR NOTING SINCE PREVIOUS MEETING**

<table>
<thead>
<tr>
<th>Item/Business in Progress</th>
<th>Progress Update</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and Learning Guide for Faculty Staff.</td>
<td>Draft, prepared by Ms Heather Morton, to be checked by Faculty Student Advisor and Faculty Manager</td>
<td>In progress</td>
</tr>
</tbody>
</table>
Part I – Items for Communication to be dealt with en bloc

There are no items for inclusion Part I

Part II – Items for Decision to be dealt with en bloc

4. TEACHING AND LEARNING COMMITTEE QUORUM
The committee does not have a defined quorum. The Chair recommends that it be at least 50% of the members plus one, which would make the quorum seven.

Part III – Items for Discussion and Decision

5. CHAIR’S REPORT
The Chair will report on Teaching and Learning issues of interest to members.

Useful links for discussion:
http://www.physclips.unsw.edu.au/ (These are award-winning animations demonstrating principles of physics.)
http://www.bioassess.edu.au (This links to a project on assessment in the biological sciences but has broader relevance to Schools in the Faculty.)
Teaching Development Papers
- http://www.nap.edu/catalog/10497.html (Transforming Undergraduate Education for Future Research Biologists, which again has broad relevance to Schools in the Faculty.)

6. EDUCATIONAL ATTRIBUTES OF SOME OF THE WORLD’S TOP 50 UNIVERSITIES
At the last meeting the paper ‘The Educational Attributes of Some of the World’s “Top 50” Universities – Discussion Paper’ was considered briefly and led to a number of ways in which the student experience could be enhanced being put forward. The Chair advised at that meeting that a number of the issues currently being considered by UWA, were also being considered by the University of Manchester and recommended that members read ‘The Interim Report of the Undergraduate Education Review Committee (February 2008)’ (ATTACHMENT A) and ‘Review of teaching, Learning and the Student Experience: Pursuing Step Change for Improvements for students (September 2007)’ (ATTACHMENT B).

The School of Sports Science, Exercise and Health has provided some comments to be considered in the Faculty response and these are listed in the attached (ATTACHMENT C)

The deadline for submission is 1 August 2008 and it is proposed that the Teaching and Learning Committee formulate the first draft of the Faculty response which can be considered by the Faculty Executive Committee at its next meeting.

7. FACULTY OR SCHOOL LEVEL FORMAL INTERNATIONAL PARTNERSHIPS FOR TEACHING AND/OR RESEARCH
The University is scheduled for its second AUQA audit in 2009. The two identified themes for this audit are international activities and the student experience

The Committee has been asked to provide:
- specific examples within our Faculty of research-informed teaching (especially the impact of student learning experience), or other evidence of a teaching and research nexus; and
- examples of Faculty or school level formal international partnerships for teaching and/or research
8. **SUBMISSION TO THE VICE-CHANCELLOR’S REVIEW OF ANIMALS**
   The University will be undertaking a review of the sections responsible for the administration of the Animal Ethics Committee – the Animal Ethics Office and the management of the Animal Care Unit. Submissions are to be sent to margaret.collins@uwa.edu.au by 16 July 2008. The Terms of Reference are provided for information (ATTACHMENT D).

   The Committee is asked to consider whether it should prepare a Faculty response in relation to the use of animals in teaching.

9. **TEACHING AND LEARNING OPP**
   The Dean has asked the Committee to identify three realistic targets for the OPP. Schools have been asked to identify their top two teaching and learning priorities. An extract from the Faculty OPP relating to Teaching and Learning is attached (ATTACHMENT E). Responses from Schools in relation to their priorities will be tabled at the meeting.

10. **PROVISION OF ENGLISH LANGUAGE SUPPORT SERVICES FOR OFFSHORE STUDENTS**
    A member has raised the question of the Faculty’s expectations of the English language skills of students enrolled in offshore programs and the support provided for developing these skills.

11. **SCHOOL REPORTS**
    Representatives will report on Teaching and Learning activities in their Schools.

12. **OTHER ITEMS OF BUSINESS**
Review of Undergraduate Education

Pursuing Step Change Improvement for Students

INTERIM REPORT OF THE UNDERGRADUATE EDUCATION REVIEW COMMITTEE

February 2008

In presenting this *Interim Report* to Senate on 6 February 2008, the Undergraduate Education Review Committee wishes to emphasise that its conclusions and recommendations remain, at this stage, to varying degrees, tentative, and in all cases open for discussion and amendment both within Senate and more widely across the University community.

The Review Committee and the various Task Forces through which it is operating also wish to thank the many members of staff from all parts of the University, and the many students who have engaged with the review process, for spending very considerable time and effort sharing their own experiences, exploring evidence and offering advice with a generosity and commitment to the seriousness of the exercise that has delighted and reassured Task Force members and greatly assisted their work.
The University of Manchester  
Office of the President and Vice-Chancellor

Review of Undergraduate Education  

Pursuing Step Change Improvement for Students

INTERIM REPORT OF THE UNDERGRADUATE EDUCATION REVIEW COMMITTEE

February 2008

1. The Review of Undergraduate Education

The University of Manchester has no priority higher than undergraduate education, nor any stakeholders more important than its undergraduate students. Yet this is not always immediately apparent. The supreme importance of research activity and postgraduate research training needs no strident advocacy. The primacy of research is taken-for-granted, as it should be. Research-led universities do not always give the impression of being equally passionate about undergraduate education, however. This may be a false impression, reflecting not so much differences of commitment as differences in the visibility and immediacy of outcomes. Nevertheless, there are good reasons for a university community such as ours to remind itself that it is undergraduate education that our major stakeholders – students and the families of students, graduates, employers, politicians, Government agencies and the wider community – all rightly see as the core business of universities.

The Manchester 2015 Agenda therefore rightly commits The University of Manchester to providing undergraduate students with an educational experience and with educational outcomes and qualifications comparable with the best in the world.

Stressing undergraduate learning thus signals no change of direction or priority. We accept that a university such as ours must be outstanding in both higher learning and research, just as it must also accept a wide range of “third mission” responsibilities, regionally, nationally and internationally.

The rest of the 2015 Agenda will be therefore be jeopardised by failure to achieve Goal Four, which commits The University of Manchester to providing our students with teachers, learning environments, teaching and learning infrastructure and support services equal to the best in the world.
Mindful of this imperative, in September 2007 The University of Manchester initiated a major Review of Undergraduate Education.

2. Background

The Review is seeking to identify, explore and build on superb examples of excellence in teaching and learning already evident in many parts of the University. It has, however, also been prompted by mounting evidence across the entire UK higher education sector that, in spite of often heroic efforts by academic teachers to maintain the quality of undergraduate education, a sustained deterioration of student:staff ratios and all the accompanying problems arising from seriously declining per capita resources have made it harder and harder over recent decades for any UK university to maintain the quality of the undergraduate student experience.

Ten years ago Sir Ron (now Lord) Dearing Chaired a National Committee of Inquiry into Higher Education (the Dearing Committee), whose major Report was entitled, Higher Education in the Learning Society. In an “Afterword”, written 10 years later, Lord Dearing has said that,

Anyone reading the report today and trying to evaluate what it had to say needs to take on board two facts and one opinion. The first fact was that student numbers had doubled over the preceding five years. The second was that on the basis of government plans at the time we were appointed, the unit of resource would have halved in 25 years. The opinion was that we needed to become a learning society, broadly based and committed to it for life.¹

The Dearing Report’s own figures and detailed analysis also recognised that the twin realities of enormous student number growth and declining unit-of-resource funding were both major trends stretching back for several decades.

Recommendation Eight of the Dearing Report was that, “... with immediate effect, all institutions of higher education give priority to developing and implementing learning and teaching strategies which focus on the promotion of student learning.”

The Report made clear the view of the Dearing Committee that “radical changes” would be required, including “changing the role of staff” and capitalising on the potential of ICT-based solutions, before higher education institutions could succeed in addressing the fundamental issues facing undergraduate education.

While this “radical” agenda has not been taken up effectively over the past decade, its urgency has increased.

The fundamental consequences of the “massification” of higher education have thus been shaping the development of higher education before and after the publication of Dearing Report. An academic currently teaching in a UK university told THES

readers recently that the rise of “mass” higher education has reached the stage where it is no longer realistic for university teachers to expect to know the names of all their students, let alone to know their students personally. Given how critical the personal element in learning is know to be, that was a horrifying observation. More broadly, we know that many students and parents are now telling universities that important elements of the undergraduate experience are leaving them disillusioned. Internal and external surveys reinforce anecdotal evidence that in a typical Russell Group university, contact between students and teachers has become increasingly impersonal; that feedback is poor; that classrooms, laboratories and library facilities typically are “tired” and over-crowded; that undergraduate education does not look or feel like a high priority; and that the higher education is simply not living up to their expectations.

Manchester must not delude itself into assuming that these are other people’s problems.

Nor should the academic community take offence at this critique. The implication is not that individual academics have failed, either in their dedication to students or in the scholarship and professionalism they bring to their teaching; it is that the pressures on them have mounted, decade after decade, to the point where the quality of the educational process is under grave threat. The problems are structural, not personal. They are rooted in the rise of “mass” higher education nationally and internationally, and in a long history of policy and funding compromises that have placed universities under inexorable pressures to do more for less.

The last 17 years of this process, presented in graphic form by Universities UK in its recent submission to the Government’s 2007 Spending Review, are presented in Graph One (below). But the trend had set in long before 1989.

**Graph One**

**Unit Funding in Real Terms (2001-02 prices, whole year count) DfES (not including private fees) per FTE from 1989-2006**

There have been funding interventions from time to time designed to reverse this trend, including a slight improvement from 2002-03 to 2005-06. But these have been at best sticking-points in a long decline in the resourcing of higher learning going
back to the early 1970s. Over many decades, the cumulative effect has placed quality undergraduate education in serious jeopardy.

A highly professional but nevertheless depressing response to such circumstances is to accept the inevitable consequences of worsening student:staff ratios on traditional higher education structures, curricula and pedagogies, while endeavouring to mitigate their effects on the quality of student learning. There is indeed something noble about the way the academic profession has fought to maintain academic standards over many years, tolerating increasing workloads and pressures in the process. But the truth is that this has been a gallant rearguard action. In the end gravely diminished per capita resourcing must tell on educational quality.

3. The Scope and Focus of the Review

In relation to undergraduate education, the Manchester 2015 Agenda is essentially a strategy for defying – and indeed reversing - the trends associated with the massification of UK higher education. It seeks to do this through:

- Financial strategies designed to reduce over the long term the reliance of the University on public funding, and

- Transformational strategies that seek to design fundamentally new approaches to teaching, learning and support for the undergraduate student experience more generally.

The Undergraduate Education Review Committee has accepted the challenge of seeking to develop such transformational strategies. Its purpose is to secure fundamental “step change” improvement in relation to undergraduate teaching and learning.

The Review has therefore been established to embrace all aspects of teaching, learning, including the overall Manchester student experience. The emphasis is on a “root-and-branch” analysis of how we are performing currently and what we must do to secure the “step change” improvement we seek. The approach has been to identify international best practice in relation to all key aspects of undergraduate education, and to develop a comprehensive set of recommendations for working towards these benchmarks.

Tinkering at the edges will leave the University with a capacity to offer good, diligently taught, well managed and effectively supported undergraduate education, but without any realistic prospect of matching the best universities in the world in this crucial aspect of our Mission.

The University of Manchester is not willing to settle for that.

The Review will therefore involve thorough, comprehensive and, where necessary, radical changes in current practice.
The Review is not in any sense about reducing costs or saving money; it is emphatically and wholly focused on improving the quality of undergraduate education and the student experience in Manchester.

A premise on which the Committee's recommendations rest is that, in the long run, no university is going to achieve an enduring international reputation for excellence in undergraduate education unless it finds new, sustainable ways to build continuing and, over time, substantial quality improvement into the educational programmes and learning environments it offers its undergraduate students.

The recommendations, taken as a whole, thus foreshadow the kinds of radical initiatives that the Dearing Report advocated in 1997.

4. Terms of Reference

The Review has been asked to provide advice in relation to:

i. The need to ensure that undergraduate education is accorded parity of esteem with research activity and postgraduate research training in the plans, structures, resource allocation models and institutional culture of the University;

ii. Opportunities for improving policies and/or operating procedures to improve the University's performance in relation to its widening participation goals;

iii. Options for improving policies and practices in relation to the setting and/or maintenance of academic standards to ensure that all Manchester graduates are assessed, and their achievements duly certified, against appropriate internationally recognised benchmarks of excellence;

iv. Options for improving the recruitment, development, reward and recognition of outstanding academic teachers;

v. Steps that might be taken to improve the structure, design and development of undergraduate curricula to ensure that curriculum development is informed by agreed educational purposes and priorities, and designed to maximise the quality of student learning;

vi. Major changes in teaching practices and in the provision of tutoring, mentoring and academic advice to ensure that all Manchester students have access to highly interactive learning environments based on frequent, meaningful personal contact with academic teachers and mentors;

vii. Opportunities for maximising the potential of on-line learning to enhance the quality of undergraduate education, both as a repository of rich, interactive learning objects and as a medium for sophisticated bilateral and unilateral interactions within learning communities;
viii. Options for changing the range, mix and quality of academic, social, cultural and individual support services offered to students to enhance the Manchester student experience; and

ix. Further steps, if any, that might be taken to position Manchester as a destination of preference for outstanding undergraduates.

5. **The Review Committee**

- President and Vice-Chancellor (Chair)
- Professor Clive Agnew, Head of School of Environment and Development
- Professor Kersti Börjars, Associate Dean (Undergraduate), Faculty of Humanities
- Professor Phil Withers, School of Materials
- Professor Alistair Ulph, Vice-President and Dean of the Faculty of Humanities
- Professor Colin Stirling, Associate Vice-President (e-Learning)
- Professor Kevin O’Brien, Associate Dean (Teaching and Learning), Faculty of Medical and Human Sciences
- Ms Jan Wilkinson, University Librarian
- Albert McMenemy, Registrar and Secretary
- Professor Pat Bailey, Associate Dean (Teaching and Learning), Faculty of Engineering and Physical Sciences
- Professor Richard Reece, Associate Dean (Undergraduate), Faculty of Life Sciences
- Professor Mike Luger, Director of the Manchester Business School
- Tom Skinner, General Secretary, UMSU
- Jeff Meddemmen, Academic Affairs Office, UMSU
- Secretary: Louise Walmsley, Head of the Teaching and Learning Support Office

6. **The Review Structure and Timetable**

The Review of Undergraduate Education operates through an overarching Undergraduate Education Review Committee, Chaired by the President and Vice-Chancellor.

The Review Committee is responsible for overseeing the work of eight separate Task Forces, each focused on a particular aspect of the overall task. The Committee seeks to meld the work of these individual Task Forces into a comprehensive analysis of opportunities for improvement. Its primary responsibility is to consolidate the findings of the Task Forces into a range of Recommendations to the Senate and the Board of Governors.

A major Briefing Paper was prepared over the summer of 2007 to identify the specific areas upon which each Task Force would focus, and to suggest approaches that the Task Forces might take.
Each Task Force completed a preliminary Report before the end of December 2007, and this Interim Report has been based on the Task Force Reports. The Interim Report is being presented to the Senate on 6 February, 2008, before going to the Faculty and Schools Conference later in February and the Board of Governors Conference in March.

While further work needs to be done, and further advice taken, before finalising the Report of the Undergraduate Education Review, it is anticipated that Senate may wish to adopt certain of the recommendations on 6 February. Proposals to that effect will be made where the recommendation concerned appears non-controversial and/or where early adoption is necessary to facilitate implementation for the 2008-09 academic year.

The Review Committee plans to produce a final Report by the end of April 2008.

7. Preliminary Recommendations

The eight separate Task Forces, each charged with reviewing a specific aspect of the overall undergraduate educational experience, have each arrived at a set of preliminary recommendations. These are as follows:

**Task Force One: Admissions and Standards (Chair: Professor Clive Agnew)**

The University is the UK’s most popular undergraduate destination. Whilst we recruit highly qualified students, we are moving further away from our HESA institutional benchmarks for widening participation. We aim to be an inclusive institution and therefore need to adopt more systematic measures to enable identification and selection of the best possible students from all educational backgrounds. Our graduates are more likely to gain a first class degree (14%) than at most other UK Universities, but this equates to over 1000 students. We need more sophisticated measures of academic performance to identify the most outstanding students and to recognise this achievement through a ‘medalist’ list. Furthermore, the *Burgess Report (2007)* recommends the adoption of a Higher Education Achievement Report (HEAR) to recognise a wider range of academic and non academic achievement. This is commensurate with broadening the undergraduate curriculum at the University to include citizenship and other forms of civic engagement.

**R1:** The University should explore options for assessing the educational potential of applicants from educationally disadvantaged backgrounds, and use its best endeavours to develop meritocratic admissions procedures based on sound, defensible principles designed to facilitate widening participation. Such procedures will necessitate moving towards a transparent system involving a range of entry grades facilitating the use of differential offers to our applicant pool.

**R2:** The University should consider introducing a range of University of Manchester Medals, or some alternative scheme, for identifying and rewarding virtuoso graduates deserving recognition as the equal of the best graduates of the best undergraduate teaching universities in the world.
R3: The University should give consideration to providing all students with a formal Higher Education Achievement Report (HEAR) at the end of their undergraduate education, in addition to providing certification based on more traditional degree classifications.

Task Force Two: Appointment, Promotion and Support of Academic Teachers (Chair: Professor Kersti Börjars)

In order for the University to change the quality of the learning experience of our students, it is crucial that staff are given unambiguous messages at every level about the importance of high quality teaching and learning, and the relation between this and the University’s high research ambitions. A number of local changes can go some ways towards achieving this; for instance making sure that all staff are involved in teaching at all levels, including first year undergraduate units. The perception that there is a “privateness” to teaching needs to be reversed; there needs to be a more robust approach to peer review, and teaching and learning needs to play a bigger role in PDR discussions. Celebrating high achievement in teaching and learning through awards also plays a part. However, the main structural factors involved in a re-evaluation of teaching and learning have been identified to be related to the role of this activity in appointment and promotion of staff and it is on this that our main recommendations focus.

R4: That a small group be established to build on the recommendations of Task Force 2 to develop clear promotion criteria (with associated evidence requirements) for the different career tracks which involve teaching and which reflect the range of activities which enhance the student experience. This group should report by 1 April 2008.

R5: Job descriptions and person specifications for posts involving teaching should contain specific enough reference to teaching and learning to ensure that a detailed discussion of this area forms a part of the interview. As part of the selection process for positions involving teaching responsibilities, applicants should be asked (i) to provide explicit evidence of teaching skills and abilities, and (ii) to identify a referee or referees able to evaluate the capability and commitment they bring to teaching responsibilities.

R6: The University should ensure that there are two separate promotion tracks for staff involved in teaching; (Senior) Lecturer and (Senior) Teaching Fellow and that teaching and learning play an important role in both types of promotion.

Task Force Three: Financial and Structural Arrangements Supporting Undergraduate Education (Chair: Professor Phil Withers)

Task Force 3 was established to evaluate the priority and commitment accorded to
undergraduate education in the overall institutional culture of The University of Manchester, and to advise on:

- Steps that might be taken to ensure parity of esteem between undergraduate education, on the one hand, and research and research training, on the other, both within the formal management and oversight of the University and the consciousness of the University community; and
- The case for extending current arrangements in parts of the University under which responsibility for teaching and learning is strengthened through the provision of separate structural and budgetary arrangements.

The Task Force acknowledged that in order for The University of Manchester to be a premium provider of world-class undergraduate education, it must adopt a powerful commitment to teaching and learning expressed in the plans, priorities, values and structures of the University. A wide range of examples of best practice were examined across the University involving a variety of budgetary models. In reaching recommendations to strengthen and underpin this objective its attention was focused on three major elements: Budgetary Structures, Education Management Structures, and Education Administration Structures.

R7: The University should ensure that clear, usable information on the revenue flows and full economic costs arising from undergraduate education are available to all teaching staff, together with a clear understanding of the financial implications of various methods, structures and approaches to teaching and learning, including course proliferation and class size.

R8: All Schools should use a properly structured work allocation model based on generic institutional guidance and designed to promote programme structures, curriculum design and development, and approaches to pedagogy and student learning that optimise student learning outcomes.

R9: Consideration should be given to changing patterns and priorities of investment in academic staffing to facilitate the provision of academic mentoring and advising for all students across their entire academic programme.

| Task Force Four: Curriculum Design and Development (Chair: Professor Alan Gilbert) |

Curriculum conceptualisation, design and development may contribute to “step change” improvement in undergraduate learning in two primary ways.

First, a fundamental transition from a “smorgasbord” approach (arising from a more or less anarchic process of unit, course and programme proliferation over time) to a more carefully planned, managed and regularly reviewed approach, is likely (despite recent moves in this direction in several Schools) to reduce academic workloads, especially in relation to preparation time, and thus release time for richer, more personal, less formal interactions with student learning.

Care will need to be taken in this process to retain generous curriculum choices for
students. The issue is to optimise a number of desirable outcomes, including the range of student choice and the richness of the learning experience within the programme chosen.

The second major benefit anticipated from a serious reappraisal of curriculum conceptualisation and design is the introduction of a much more conscious, explicit and formative sense of the purposes of undergraduate learning at all levels and in all aspects of the Manchester learning experience. Contemporary international research into the quality of undergraduate learning is placing major emphasis on the importance of the linkage between purposeful teaching and quality learning outcomes.

Manchester undergraduates should therefore know in advance, for example, that the academic programme they are undertaking has been designed, developed, accredited and assessed:

➤ To develop critical thinking and higher order conceptual, reasoning and analytical skills,

➤ To promote mastery of a discipline,

➤ To challenge and equip students to confront personal values and make ethical judgements,

➤ To prepare graduates for citizenship and leadership in diverse, global environments,

➤ To broaden intellectual and cultural interests,

➤ To prepare graduates for professional and vocational work, and

➤ To develop advanced skills of written and verbal communication.

It should have been made clear to them at registration that these purposes will be pursued, by different means and with differing emphases, in all the courses and units they undertake in the University, and that the University, in assessing the quality of the undergraduate education it offers, will seek evidence of educational value-adding in relation to each of the purposes to which it is committed.

R10: The University should adopt a clear statement setting out the purposes it seeks to achieve in all its undergraduate courses as a means of ensuring that all Manchester students have systematically developed and monitored opportunities for broad educational, vocational, intellectual and personal development.

R11: The University should adopt a matrix setting out the Purposes of Higher Education similar to that presented in the appendix, and should use this matrix as a basis for (i) evaluating the appropriateness of course proposals and (ii) assessing the outcomes of student learning.

R12: Those responsible for developing and maintaining undergraduate curricula in all Schools and Faculties should undertake regular, systematic reviews of
curriculum development and delivery to ensure that educational standards are not being compromised by the academic staff workload implications of course proliferation.

R13: Curricula should be designed around pedagogical principles providing for highly interactive learning, significant elements of formative assessment and timely, high quality personal feedback on learning processes and outcomes.

R14: The University should give priority to establishing an Undergraduate Curriculum Sub-Committee of Senate to assume responsibility to Senate for:

a) Evaluating all curriculum changes and programme proposals recommended by Schools and Faculties to determine whether they are academically appropriate and financially sustainable, and making recommendations to Senate accordingly;

b) Reviewing the University’s academic programmes regularly and systematically to ensure that the design, development, delivery and assessment of curricula are shaped by the learning outcomes identified in the introduction to the work of this Task Force;

c) Ensuring, in the interests of student learning, that a proper balance is maintained between the breadth of curricula and the capacity of the University to provide high quality, highly interactive, personal learning environments, both face-to-face and on-line;

d) Initiating suggestions to the Schools and Faculties about steps that might be taken to improve their curricula and programmes; and

e) Reporting annually to Senate on the success of the University in adhering to the University’s norms governing small group teaching and access for all students to effective mentoring and advising.

R15: Senate should consider establishing this Curriculum Sub-Committee with the following membership: Chair of Senate or nominee (Chair); Vice-President (Teaching and Learning); Associate Deans (Teaching and Learning) of all Faculties; four members of Senate elected by the Senate; two student members nominated by the Students’ Union. [Secretary: Head, Teaching and Learning Support Office].

| Task Force Five: Personalised Learning (Chair: Professor Alistair Ulph) |

The two principle characteristics of personalised learning identified by Task Force 5 were scale (allowing students to interact with tutors on an individual or small group basis), and choice (by students, with personal guidance by academic staff, of what to study, within a coherent curriculum, and how and when to learn). Our analysis of how Schools might provide smaller group sizes (or more time for advising) within existing staffing resources revealed an important trade-off between these two characteristics, since the most effective way of doing this is to reduce the number of units offered. We emphasise the need for proper support for personalised learning by students, through every student having an academic adviser, the establishment of a unit to support students find their most effective ways of learning, and greater use of
peer-assisted study sessions. Finally we argue that enquiry-based learning, broadly defined, provides one effective way of delivering more personalised learning.

R16: To enable all students to have the opportunity to work in small groups, Schools must consider both the appropriate mix of teaching staff (e.g. lecturers, teaching fellows, properly trained GTAs) employed and the balance between the number of units offered and the size of small groups that teaching staff can support.

R17: All students must have access to an academic advisor with whom they can develop a meaningful discussion to include academic progress, skill acquisition, approaches to learning and academic choices.

R18: A Personalised Learning Centre should be established to support students to develop their personal and academic skills, provide diagnostic testing in key skill areas, and support staff in their implementation of personalised learning.

### Task Force Six: On-Line Learning (Chair: Professor Colin Stirling)

The Task Force makes a series of recommendations designed to embed e-Learning as a key element of the teaching and learning culture of the University. It further aims to enhance the University’s reputation for teaching excellence and to provide a richly interactive and stimulating environment for students and staff alike. A robust and sustainable infrastructure will be required for the development of high quality digital content, delivered by sound educational methods. Investment in the necessary infrastructure has already begun with the rapid deployment of Blackboard and the restructuring of e-Learning support structures.

R19: The University should commit itself to being a leader in the development and application of e-learning, not as an end in itself, but as a means of providing the richest possible learning environments for students and recognising the increasing familiarity with and reliance on on-line and other digital services and solutions by contemporary students for accessing, evaluating, analysing and presenting information.

R20: Blackboard should be confirmed as the University’s preferred virtual learning environment system, and every individual student should have a presence in Blackboard from September 2008.

R21: Priority should be given to exploiting on-line services and solutions as a means of providing, as a matter of course, all students with opportunities for rich, personal learning interactions both with teaching staff and with other students.

R22: To facilitate the adoption of e-learning, templates and on-line tutorials should be prepared and support/training staff identified to assist academic staff wishing to transfer teaching and learning materials into Blackboard.

R23: Every student should be able to access all relevant programme/unit
information by virtue of their automatic enrolment in Blackboard.

R24: All course units should have a dedicated on-line teaching space providing for high levels of interaction, formal and informal, between students and teachers (on both a one-to-one and a group basis) as well as between individual students and within groups of students.

R25: Consideration should be given by the Planning and Resources Committee to adjusting the University’s basic funding model to create financial incentives for the adoption of on-line learning.

**Task Force Seven: Library and Information Services (Co-Chairs: Ms. Jan Wilkinson and Professor Kevin O’Brien)**

Students and staff expect access to contemporary teaching accommodation that is adequately equipped for a range of learning and teaching styles, and that is also conveniently situated near to their School. Furthermore, the 21st century internet connected student will increasingly use a range of on and off campus services via both University and personal (increasingly mobile) devices. We envisage the need for high quality on-campus services coupled with provision of infrastructure to enable mobile access to services both on and off campus. Students will use a mixture of University services (delivered, where possible, in an integrated manner through Internet/Portal technology) and outsourced University services where these offer clear benefit.

R26: Priority should be given to the integration of traditional library services with increasingly sophisticated on-line environments through the high-level integration of planning and management in these areas.

R27: Serious consideration should be given within the capital planning processes of the University to the quality of the physical environments and facilities available for undergraduate education, and, in particular, to the development of a world class “information commons” based on a hub and spoke model providing students with amenable social and informal working space designed around access to Library and other on-line information services.

**Task Force Eight: Student Support Services (Chair: Mr Albert McMenemy)**

From the beginning, Task Force 8 welcomed the fact that student support services, defined comprehensively, had its own Task Force. However, it was also recognised that future provision and prioritisation of student support services would inevitably be influenced strongly by the recommendations emanating from the other Task Forces and this is reflected in our recommendation. The Task Force undertook valuable research in the course of its work, some of which will now be implemented in day to day operations, and considered carefully the implications of that research alongside their knowledge of the sector. This led to the conclusion that optimising the first year experience, academically, socially and residentially was of particular importance with regard to the quality of the student experience and learning outcomes. In addition, the
patchiness of the policy framework in these areas required further concentrated work. As referred to above, we expect that one inevitable outcome of the overall review process will be a re-prioritisation of resources which may lead to organisational change and ways of working

**R28: The University should develop a more informed set of priorities for investing in the quality of the environments that shape the Manchester student experience and that influence the quality of learning outcomes.**

In undertaking this work, particular consideration should be given to:

(i) optimising the first year student experience, academically, socially and residentially and:
(ii) further developing the policy framework and the funding and organisational arrangements which underpin the student experience and learning outcomes.

Professor Alan Gilbert
Chair
Undergraduate Education Review

29 January 2008
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<tr>
<th>The Purposes of a Manchester Education</th>
<th>Graduate Attributes</th>
<th>Assessment Criteria</th>
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<tbody>
<tr>
<td>1. To develop critical thinking and higher order conceptual reasoning and analytical skills</td>
<td>Manchester graduates will have been encouraged to develop their intellectual curiosity, will have learned how to learn, will have a clear grasp of the fundamental differences between fact and opinion, truth and falsity, validity and invalidity, and will have acquired the basic intellectual tools of logical analysis and critical inquiry.</td>
<td>Logical reasoning</td>
</tr>
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<td></td>
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<td>Analysis</td>
</tr>
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<td></td>
<td></td>
<td>Synthesis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluation</td>
</tr>
<tr>
<td>2. To promote mastery of a discipline</td>
<td>Manchester graduates will have mastered the epistemological, methodological and essential knowledge base of at least one discipline or taught in the University, acquiring a basic understanding of the processes of inquiry and research through which existing paradigms are evaluated and new knowledge created in that discipline or disciplines</td>
<td>Knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Epistemology</td>
</tr>
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<td></td>
<td></td>
<td>Methodology</td>
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<td></td>
<td></td>
<td>Comprehension</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Application</td>
</tr>
<tr>
<td>3. To broaden intellectual and cultural interests</td>
<td>Manchester graduates will be encouraged to value knowledge for its own sake, and to appreciate virtuosity and creativity, whether in art, music, literature or any other medium through which human discourse and human culture are advanced and enriched.</td>
<td>Intellectual curiosity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cultural awareness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Understanding of the historical development and cultural context of particular traditions, disciplines or bodies of knowledge</td>
</tr>
<tr>
<td>4. To prepare graduates for professional and vocational work</td>
<td>Manchester graduates in professional disciplines will have the knowledge and advanced technical skills demanded in a an increasingly sophisticated and rapidly changing professional workplace, and will have been provided with opportunities to develop accompanying skills of initiative, teamwork and professional communication.</td>
<td>Professional knowledge</td>
</tr>
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<td></td>
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<td>Professional Skills</td>
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<td></td>
<td>Professional Qualities</td>
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<td></td>
<td></td>
<td>Communication and Team work</td>
</tr>
<tr>
<td>5. To challenge and equip students to confront personal values and make ethical judgements</td>
<td>Manchester graduates will have been provided with opportunities to develop personal qualities of independence of mind and to take responsibility for the values, norms, assumptions and beliefs that guide their behaviour as individuals and citizens.</td>
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</tr>
<tr>
<td>6. To prepare graduates for citizenship and leadership in diverse, global environments</td>
<td>Manchester graduates will have been encouraged and enabled to confront their own civic values and responsibilities as local, regional and global citizens.</td>
<td></td>
</tr>
<tr>
<td>7. To develop advanced skills of written and verbal communication</td>
<td>Manchester graduates will be equipped with advanced skills of written and verbal communication.</td>
<td></td>
</tr>
<tr>
<td>8. To promote equality and diversity</td>
<td>Manchester graduates will have been educated in an environment that embraces and values cultural diversity, and that is fundamentally committed to equality of opportunity regardless of gender, race, disability, religious or other beliefs, sexual orientation or age.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethical awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grasp of ethical principles</td>
</tr>
<tr>
<td>Awareness of relevant professional ethics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Awareness of social, political and environmental issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of social responsibility</td>
</tr>
<tr>
<td>Leadership skills</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ability to communicate verbally and in writing lucidly, accurately, relevantly, succinctly and engagingly</th>
</tr>
</thead>
</table>

| A key consideration informing the design, development, delivery and assessment of all Manchester curricula |
The University of Manchester
Office of the President and Vice-Chancellor

Reviews of Teaching, Learning and the Student Experience

Pursuing Step Change Improvement for Students

1. The Reviews

The University of Manchester is a leading provider of higher education, offering good, scholarly programmes that are well taught, well managed and effectively supported. But like all large, comprehensive universities with tens of thousands of students and high student:staff ratios, Manchester has over recent decades had to make inimical compromises between size and quality, particularly at the level of undergraduate education. Despite the evident motivation, dedication and skill of those engaged in undergraduate education across all our Faculties, the inexorable pressure of having to produce more and more graduates with diminishing per capita resources threatens to take an increasingly heavy toll on our capacity to offer students a learning experience of the highest quality.

Taking steps to ensure the quality of our postgraduate research programmes is also timely. Not only is this a vital aspect of our research agenda more broadly, but we have ambitious growth targets for postgraduate research enrolments while simultaneously seeking to enhance the postgraduate research experience. Reviewing postgraduate taught programmes is important for somewhat different reasons. As a university committed to professional education and responsive to the needs of a national and international knowledge workforce, we need to ensure that our postgraduate taught programmes are purposefully linked to our overall educational strategies, and particularly our plans for becoming a major contributor to executive education and training and high-level skills formation.

These are all profoundly important educational issues that we must address and resolve if we are to make Manchester one of the best universities in the world. I am therefore establishing three separate review processes:

- Undergraduate Education.
- Postgraduate Taught (PGT) Programmes, and
- Postgraduate Research (PGR) Programmes.

These will be strategic, root-and-branch reviews. Tinkering at the edges will leave the University a very large, highly credible, increasingly stressed provider of good quality higher education, but without any realistic prospect of matching the best universities in the world in this vital dimension of its mission.

We must not settle for that. Rather, at what is still an early stage in the development of the new University, we must seek fundamental “step change” improvement in the
quality of our educational programmes and outcomes, and in the myriad enabling activities that support teaching and learning.

*The reviews are not in any sense about reducing costs or saving money.* They are emphatically and wholly focussed on quality improvement. In each case the Terms of Reference will direct the reviewers to questions about the fundamental purposes and goals of higher learning, and require them to base their findings and recommendations on the most fundamental and searching appraisal of the University’s current performance against the best educational standards, practices and outcomes in the world.

2. **The Review Schedule**

The *Review of Undergraduate Education* will be conducted between September 2007 and March 2008, with the *Review of Postgraduate Taught Programmes* and the *Review of Postgraduate Research Programmes* following in 2008, as workload pressures associated with the RAE and the Undergraduate Education Review diminish.

As President and Vice-Chancellor, I will chair the *Review of Undergraduate Education*. I regard this as one of my most important priorities over the next few months.

The Chairs of the *Review of Postgraduate Research (PGR) Programmes* and the *Review of Postgraduate Taught (PGT) Programmes* will be determined in due course.

3. **The Review of Undergraduate Education**

The Review of Undergraduate Education will embrace all aspects of teaching and learning, including the overall Manchester student experience. It will be charged with developing a comprehensive set of recommendations for achieving step change improvement in the quality of undergraduate education in the University and is being established on the basis that it will undertake the review at a fundamental level and without being constrained by existing structures and processes.

3.1 **Terms of Reference.** In reporting on its deliberations, the Review of Undergraduate Education will make recommendations covering:

- The need to ensure that undergraduate education is accorded parity of esteem with research and research training in the plans, structures, resource allocation models and institutional culture of the University;

- Opportunities for revising policies and/or operating procedures both to enhance the quality of students admitted and to improve the University’s performance in relation to its widening participation goals;

- Options for improving policies and practices in relation to the setting and/or maintenance of academic standards to ensure that all Manchester graduates are assessed, and their achievements duly certified, against appropriate international benchmarks of excellence;
as at 27 September 2007

➢ Options for improving the recruitment, development, reward and recognition of outstanding academic teachers;

➢ Steps that might be taken to improve the structure, design and development of undergraduate curricula to ensure that curriculum development is informed by agreed educational purposes and priorities, and designed to maximise the quality of student learning;

➢ Major changes in teaching practices and in the provision of tutoring, mentoring and academic advice to ensure that all Manchester students have access to highly interactive learning environments based on frequent, meaningful personal contact with academic teachers and mentors;

➢ Opportunities for maximising the potential of on-line learning to enhance the quality of undergraduate education, both as a repository of rich, interactive learning objects and as a medium for sophisticated bilateral and unilateral interactions within learning communities;

➢ Options for changing the range and mix and improving the quality of academic, social, cultural and individual support services offered to students, in order to enhance the Manchester student experience; and

➢ Further steps, if any, that might be taken to position Manchester as a destination of preference for outstanding undergraduates.

3.2 Review Structure and Timetable. The Review of Undergraduate Education will operate through an overarching Undergraduate Education Review Committee and will have responsibility for overseeing the work of eight subordinate Task Forces and melding the advice of these Task Forces into a final Report accompanied by the range of Recommendations envisaged above.

The eight separate Task Forces, each charged with reviewing a specific aspect of the overall undergraduate educational experience, are being established as follows:

(i) Admissions and Standards (Chair: Professor Clive Agnew)

(ii) Appointment, Promotion and Support of Academic Teachers (Chair: Professor Kersti Borjars)

(iii) Institutional Priorities, Structures and Commitment (Chair: Professor Phil Withers)

(iv) Curriculum Design and Development (Chair: Professor Alan Gilbert)

(v) Personalised Learning (Chair: Professor Alistair Ulph)

(vi) On-Line Learning (Chair: Professor Colin Stirling)
(vii) **Library and Information Services** (Co-Chairs – Mrs Jan Wilkinson and Professor Kevin O’Brien)

(viii) **Student Support Services** (Chair: Mr Albert McMenemy)

Professor Pat Bailey will assume responsibility for the student liaison dimension of the work of the review.

A Briefing Paper entitled, *Positioning Manchester as a Premium Provider of World Class Undergraduate Education*, has been prepared to inform and assist the work of the Task Forces by identifying key issues and priorities and suggesting approaches that the Task Forces might take.

Each Task Force will be expected to report by the end of December 2007. A Report, including recommendations, will then be finalised for presentation to the Senate on 6 February, 2008, before going to the Faculty and Schools Conference later in February and the Board of Governors Conference in March.

### 3.3 Fundamental Challenges

There are three areas where it is clear from the outset that fundamental re-thinking will be necessary are.

- **The undergraduate curriculum.** Given their student:staff ratios and workload pressures on teaching staff, large, comprehensive providers of undergraduate education cannot hope to improve the quality of student learning while retaining a smorgasbord approach to curriculum design and development. Unless we succeed in eliminating all vestiges of such an approach, and developing instead much more focused, purposeful, carefully designed curricula that we are able to resource properly, we will be unlikely to achieve any breakthrough in the quality of undergraduate education.

- **The Manchester learning experience.** The most important single characteristic of world class higher learning is the provision of personalised, richly interactive student learning. There are no viable alternatives. Manchester must find innovative ways to escape larger classes with their higher student:staff ratios and an increasingly depersonalised student experience if it is to offer genuinely world class undergraduate education. That will mean offering all our students genuine opportunities for meaningful personal interaction with teachers, mentor and advisors. There is no short-cut to quality that avoids finding a satisfactory solution to this problem.

- **On-line learning.** In the small learning communities characteristic of the world’s best small, most richly resourced universities, the desirability of providing students with state-of-the-art on-line environments is already well-recognised. In the medium term no university, however blessed with physical learning infrastructure and face-to-face personal learning interactions, is going to be able to ignore the need thoroughly to integrate on-line learning into traditional learning environments. But for a large university unable to avoid increasingly depersonalised face-to-face interactions between teachers and taught, developing effective on-line solutions to the challenge of enriching student learning is already a vital imperative.

Identifying these three areas as in need of fundamental re-thinking and innovation redevelopment does not imply that equally fundamental imperatives will not emerge
from the work of all the other Task Forces established as part of the overall Review.

3.4 Next Steps. The initial meeting of the Undergraduate Education Review Committee is planned for late September. Its membership will include the Chairs of the eight Task Forces, together with Associate Deans (Teaching and Learning) not already included as Task Force Chairs, a student member and a number of the University’s leading academic teachers.

In the meantime, the composition of the Task Forces, which will involve students and teaching staff, will be determined following consultation led by Vice-President/Deans and Associate Deans (Teaching and Learning) and embracing members of Senate.

Alan Gilbert  
President and Vice-Chancellor  
September 2007

SELECTED SOURCES:


Peter T. Knight and Paul R. Trowler, *Departmental Leadership in Higher Education* (Open University Press, 2001)


Thomas Laird, “Surfin’ with a Purpose: Examining How Spending Time Online is Related to Student Engagement”, *Student Affairs Online*, Vol. 5, No. 3 (Summer 2004).

Richard Light, *Making the Most of College: Students Speak their Minds* (Harvard, 2001)


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1 Especially Chapter Six, pp 99-118.  
2 Especially Chapters Twenty-Seven, and Fourteen  
3 Especially Chapters Eight and Nine, (pp. 135-179)
as at 27 September 2007


See also a major collection of Research Papers published by the National Survey of Student Engagement, a regular national survey in the US conducted by the Indiana University Centre for Postsecondary Research:

1. Does reading such a paper inspire UWA to consider a paper on what we do well, or what we do better than our direct opponents?

2. Inevitably one is forced to ask, how do we perform better (particularly in research) without many of the cultures inherent in the Top Universities?
   - low staff student ratios
   - funds to develop a true research culture
   - high proportion of live-in UG students

3. Relatively large number of 'teaching intensive' academics – they seem higher than at UWA

4. Teaching that is characterized by:
   - small group teaching
   - peer mentoring

5. Many of these Universities consider UG teaching to be the 'heart of the University'

The real issue is funds to support research only staff, without having to continually move money from teaching and use part of it to support research – this happens at University and School levels. We get in approximately 69% of our funds for UG teaching but only use this for 62% of School function.

My thoughts for the day
Regards
Bruce Elliott
Colleagues

The University of Western Australia will shortly be undertaking a review of the sections responsible for the administration of the Animal Ethics Committee - the Animal Ethics Office (AEO) and the management of the Animal Care Unit (ACU).

The Vice-Chancellor’s Review of Animals Used in Teaching and Research at The University of Western Australia Committee is scheduled to meet the week commencing on 4 August 2008.

The Review Committee invites you to make a general submission on the performance of the AEO and the ACU. The Terms of Reference are provided here for your information.

Terms of Reference for the Review of Animals Used in Teaching and Research at The University of Western Australia

1. Consider the growth in animal usage at UWA, by animal type, and teaching and research purpose and provide advice on likely trends and the implications of these, taking into account the requirement that the University observe the three Rs (Reduction, Refinement, and Replacement) as set out in ‘The Australian code of practice for the care and use of animals for scientific purposes’ (the Code).

2. Examine the organisation of the production, provision and care of animals for use in teaching and research, and the provision of appropriate facilities for working with these animals, with reference to organisational structures, managerial efficiency and responsiveness.

3. Examine the costs of the animal care function and the costs of the provision of animals for teaching and research, and provide advice on how best to deliver the required service at an appropriate price. Advice is also requested on the present model for funding animal facilities through the 1/3(central):1/3(faculty):1/3(users) model and a consideration of increasing user charges to specific projects related to the nature of the specific support required.

4. Examine the animal ethics processes and provide advice on how these could be made more efficient, transparent, and responsive while ensuring compliance with ‘The Code’. Specific suggestions on how to improve the working relationship between the Animal Ethics Committee, the Animal Ethics Office and animal users would be particularly appreciated.

Please circulate this email among research students, as they are also invited to make submissions.

Please send any submissions to margaret.collins@uwa.edu.au by 16 July 2008

Alan Robson
Vice-Chancellor
## TEACHING AND LEARNING

<table>
<thead>
<tr>
<th>Priority Objectives</th>
<th>Performance Indicators / Targets</th>
<th>Implementation Strategies</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| To improve teaching infrastructure                                                 | Improved CEQ scores and graduate outcomes *(see TL1-5 on the Performance Indicators / Targets Schedule in Appendix A)* | Identify and set infrastructure priorities.  
Set aside funds to improve teaching infrastructure when identified and implement changes. | University / Dean / HoS  
Dean / Associate Dean (Teaching & Learning)                                          |
| To improve programs, courses and units                                             | Clearly stated graduate attributes for all programs and courses by the end of 2007.               | Review programs within the BSc to ensure that the structure is appropriate and programs are viable. | Dean / Associate Dean (Teaching & Learning) / Program Coordinators |
| To improve student perception of and involvement with the Faculty                  | Improved CEQ scores *(see TL1-5 on the Performance Indicators / Targets Schedule in Appendix A)*  
Greater interaction with the Science Union.                                       | Develop eNewsletter for students.  
Strengthen relationship with the Science Union.  
Work with the Science Union to identify what impacts on the student experience.     | Faculty Manager  
Dean / Associate Dean (Teaching & Learning) / Faculty Manager / HoS                  |
| To improve experience in undergraduate programs                                     | Improved CEQ scores *(see TL1-5 on the Performance Indicators / Targets Schedule in Appendix A)*  
Increase Honours enrolments by 10% by 2008.                                         | Get students involved in the research group of the supervisor.                             | HoS                                      |
| To improve the postgraduate student experience                                     | Maintain PREQ (Postgraduate Research Experience Questionnaire) scores over the coming five years. 
Improved CEQ scores *(see TL1-5 on the Performance Indicators / Targets Schedule in Appendix A)* | Investigate what issues effect the postgraduate student experience.                        | Dean / Associate Dean (Research) / HoS   |
| To improve the opportunities for Life and Physical Sciences undergraduates to gain international experience at a partner university | At least 5 students taking Honours overseas by 2008.  
Increase number of students in the BSc (International) program to 10 students by 2008.  
Increase number of students in the BSc (Advanced Science) program to 8 students by 2008. | Improve opportunities for science students to study abroad.  
Promote BSc (International) and BSc (Advanced Science).                              | Overseas Development Manager / Dean / Program Coordinators                                |
**TEACHING AND LEARNING (cont..)**

<table>
<thead>
<tr>
<th>Priority Objectives</th>
<th>Performance Indicators / Targets</th>
<th>Implementation Strategies</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Objectives:</td>
<td>Specific Indicators:</td>
<td>Operation:</td>
<td></td>
</tr>
<tr>
<td>To improve teaching skills of staff</td>
<td>Improved SURF results <em>(see TL7 on the Performance Indicators / Targets Schedule in Appendix A)</em>.</td>
<td>Schools to review SURF performance. HoS to incorporate SURF results in staff reviews.</td>
<td>HoS</td>
</tr>
<tr>
<td></td>
<td>Increase nominations for teaching awards by 5% by 2008.</td>
<td></td>
<td>HoS</td>
</tr>
<tr>
<td>To recognise good teaching through teaching awards</td>
<td>Faculty to submit two nominations for each category of Carrick awards.</td>
<td>Develop Faculty teaching and learning awards and encourage nominations for Carrick awards.</td>
<td>Dean / Associate Dean (Teaching &amp; learning) / HoS</td>
</tr>
<tr>
<td>To develop best-practice and benchmarking in all aspects of teaching and learning activity within the Faculty</td>
<td>Improved CEQ scores <em>(see TL1-5 on the Performance Indicators / Targets Schedule in Appendix A)</em>.</td>
<td>School reviews to incorporate comparative CEQ performance of other Go8 universities. Revitalise Teaching &amp; Learning Committee at Faculty and School level.</td>
<td>HoS</td>
</tr>
<tr>
<td>To ensure that students are aware of the skills they acquire through the educational process.</td>
<td>Improved CEQ scores <em>(see TL1-5 on the Performance Indicators / Targets Schedule in Appendix A)</em>.</td>
<td>OBE proformas to be completed. Appointment of project officer to drive the implementation of graduate attributes.</td>
<td>HoS</td>
</tr>
<tr>
<td></td>
<td>Graduate attributes to be implemented by end of 2007 for all science programs and majors.</td>
<td></td>
<td>Faculty Manager</td>
</tr>
<tr>
<td>To increase the recruitment of high quality students locally and internationally</td>
<td>Increase of 10% in the number of students entering science with a TER of 95 or above by 2008.</td>
<td>Build closer relationships with local and elite international High Schools. Raise awareness of Science programs.</td>
<td>Dean / Associate Dean (Teaching &amp; Learning) / HoS / School Liaison Officer</td>
</tr>
<tr>
<td>Identify and develop coursework Master's programs</td>
<td>Three new self-supporting coursework programs by 2008.</td>
<td>Develop coursework programs that meet National and State Government needs in relation to skills shortages e.g. Analytical Chemistry, Infectious Diseases.</td>
<td>Dean / Associate Dean (Research)</td>
</tr>
</tbody>
</table>
### TEACHING AND LEARNING – PSB

<table>
<thead>
<tr>
<th>Priority Objectives</th>
<th>Performance Indicators / Targets</th>
<th>Implementation Strategies</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Objectives:</td>
<td>Specific Indicators:</td>
<td>In collaboration with PSB target Indonesia, Vietnam and China to increase recruitment of international students into Singapore program.</td>
<td>Operational:</td>
</tr>
<tr>
<td>To consolidate the PSB-UWA Program</td>
<td>Target recruitment of 160 in each year of the program to be exceeded.</td>
<td></td>
<td>Dean / Life and Physical Sciences Director of Offshore programs</td>
</tr>
<tr>
<td>Maintain the present level of recruitment on- and offshore of Polytechnic students into LPS degrees offered through PSB.</td>
<td>Identify courses that can be offered through PSB e.g. Biophysics and Chemistry. Implement two new courses for the PSB by 2008.</td>
<td></td>
<td>Life and Physical Sciences Director of Offshore programs</td>
</tr>
<tr>
<td>Establish offshore Honours programs through the PSB</td>
<td>Establish Honours program at PSB by 2008.</td>
<td>Investigate opportunities for Honours programs to be offered through PSB in collaboration with research institutes based in Singapore. Identify research institutes which could be approached to participate in the Honours program.</td>
<td>Dean / Life and Physical Sciences Director of Offshore programs</td>
</tr>
</tbody>
</table>
### Appendix A – Performance Indicators / Targets Schedule

#### CEQ scores

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CEQ Overall Satisfaction Index- % Agreement</td>
<td>75.2%</td>
<td>75.0%</td>
<td>71.4%</td>
<td>71.6%</td>
<td>72.9%</td>
<td>75.5%</td>
<td>78.2%</td>
</tr>
<tr>
<td>2. CEQ Good Teaching Scale- % Agreement</td>
<td>50.6%</td>
<td>51.1%</td>
<td>48.9%</td>
<td>49.1%</td>
<td>50.1%</td>
<td>52.2%</td>
<td>54.9%</td>
</tr>
<tr>
<td>3. CEQ Generic Skills Scale- % Agreement</td>
<td>70.9%</td>
<td>71.4%</td>
<td>67.3%</td>
<td>66.5%</td>
<td>67.5%</td>
<td>69.7%</td>
<td>72.1%</td>
</tr>
<tr>
<td>4. CEQ Graduate Qualities Scale % Agreement</td>
<td>73.6%</td>
<td>73.5%</td>
<td>69.6%</td>
<td>69.4%</td>
<td>70.6%</td>
<td>72.5%</td>
<td>74.0%</td>
</tr>
<tr>
<td>5. CEQ Learning Community Scale % Agreement</td>
<td>54.6%</td>
<td>53.7%</td>
<td>51.9%</td>
<td>50.5%</td>
<td>51.7%</td>
<td>53.6%</td>
<td>55.3%</td>
</tr>
<tr>
<td>7. SURF Q6- % Agreement</td>
<td>n/a</td>
<td>n/a</td>
<td>85.8%</td>
<td>87.2%</td>
<td>87.6%</td>
<td>88.3%</td>
<td>88.9%</td>
</tr>
<tr>
<td>8. NSSE Q14- % Excellent or Good</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>82.5%</td>
<td>83.2%</td>
<td>84.1%</td>
<td>84.9%</td>
</tr>
</tbody>
</table>

#### Notes:

1-5. The % of respondents with a value of 4 or 5 on the respective CEQ scale items. Year refers to year of the survey; i.e. year after completing the course.

7. The % of respondents agreeing that the unit was 'a good educational experience' (SURF item 6). Year refers to year of enrolment.

8. The % of respondents rating their entire educational experience at UWA as excellent or good (NSSE item 14). Year refers to year of enrolment.

#### Additional indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. UWA first preference - science</td>
<td></td>
<td></td>
<td></td>
<td>513</td>
<td>536</td>
<td>590</td>
<td></td>
</tr>
<tr>
<td>2. Honours enrolments non-UWA students in Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>3. Number of Honours enrolments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Number of Honours student overseas</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>5. Number of students commencing the BSc (International) - EFTSL</td>
<td>n/a</td>
<td>2.0</td>
<td>1.0</td>
<td>2.5</td>
<td>4.5</td>
<td>7.5</td>
<td>10</td>
</tr>
<tr>
<td>6. Number of students commencing the BSc (Advanced Science) - EFTSL</td>
<td>2.0</td>
<td>2.3</td>
<td>3.1</td>
<td>4.6</td>
<td>6.0</td>
<td>7.2</td>
<td>8</td>
</tr>
<tr>
<td>7. Nominations for teaching awards</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8. Science students TER 95 or above</td>
<td>n/a</td>
<td>n/a</td>
<td>64</td>
<td>90</td>
<td>86</td>
<td>92</td>
<td>99</td>
</tr>
</tbody>
</table>