



MONASH University

“Don’t measure your achievements by the aspirations of someone else.”

R. Frances, Faculty Without Borders; Arts Vision statement, June 2007

Education Plan Implementation Corps

The Monash Review of Coursework (RoC): Volume 1

Final Report and Recommendations

December 2007

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<http://www.monash.edu/teaching/epic/>

“In the context of delegitimisation, universities and the institutions of higher learning are called upon to create skills, and no longer ideals ... The transmission of knowledge is no longer designed to train an elite capable of guiding the nation towards emancipation, but to supply the system with players capable of acceptably fulfilling their roles at the pragmatic posts by its institutions.” (p. 48)¹

¹ Lyotard, Jean-François 1987 The postmodern condition. A report on knowledge. (G. Bennington & B. Massumi. Translation). Manchester: Manchester University Press. (French original published in 1979)

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ACKNOWLEDGEMENTS

This report is the product of a genuine effort to accommodate a wide spectrum of views, experiences and expectations from across the Monash network. This network is comprised of many and very diverse stakeholder groups – students, staff, management, administration, faculties, employers and external government and private sector agencies. Much energy has been invested into collecting and collating, scoping and analysing large sets of often unorganised data and information.

We have made every effort to accommodate many points of view and disparate perspectives put to us during our extensive consultations with all stakeholder groups and believe that this report constitutes an honest attempt at developing an evidentiary threshold upon which we base our recommendations.

Consensus in a project as large and complex as this was always going to be difficult, perhaps even impossible. It is hoped, however, that an acceptable balance has been struck.

Many colleagues have contributed to the Monash Review of Coursework, and I offer my sincere apologies to anyone whose name has been omitted. Their valuable input is duly recognised.

There are several individuals and groups who deserve to be mentioned separately:

Review of Coursework Committee (RoCC):

RoCC was initially comprised of members of the original Education portfolio, and established by the former SDVC, Professor Stephen Parker, as a reference committee tasked with the discussion and exchange of ideas relating to the Education Plan and the Review of Coursework in particular. The committee membership² changed during the course of 2007. I thank all members of the committee for their patience, persistence and invaluable contributions during our many meetings. With the arrival of the new DVC-E in September 2007 the RoCC was effectively disbanded and a more direct reporting line established between EPIC and the O-DVC-E.

Faculty Deans:

During our workshops and many discussions Deans were very supportive of the Review of Coursework process.

Associate Deans (Teaching/Academic Programs)

I am particularly grateful and indebted to Faculty Associate Deans Teaching for their input and support. They have been more than just informants, they have been real colleagues who have provided insight into how faculties operate, shown me where there is scope for collaboration and where due regard needs to be given to the special needs of individual faculties. Their generosity and preparedness to share ideas and information needs to be applauded. Above all, I would like to thank the following colleagues:

² Permanent and temporary members were: Prof. Stephen Parker (SDVC – until 02/2007); Prof. Merran Evans (PVC-Planning & DVC-E (acting; 03-08/07); Prof. Max King (PVC-Research and Research Training), Prof. Phillip Steele (PVC-Campus Coordination), Prof. Rob Willis (Academic Director; Clayton & Caulfield; until 02/07); Prof. David Murphy (Director CALT); Ms. Robyn Harris (Director CHEQ); Mr. Alan McMeekin (Exec. Director, ITS); Ms. Lee-Ann Norris (Marketing & Student Recruitment); Ms. Michelle King (Director, O-SDVC, until 02-07); Dr. Cecilia Hewlett (Acting Director, ODVC-E); Ms. Helen Fletcher-Kennedy (Manager, EPIC); Mr. Jeffrey Bender (Project Manager; EPIC)

Tony Luff and Louise McCall; Medicine, Nursing and Health Sciences
Owen Hughes, Julian Teicher, Sally Joy and Tony Dingle; BusEco
Mark Peel and Graham Oppy; Arts
Peter Stewart; Pharmacy
Brenton Doecke, Education
Julie Roberts, Art & Design
David Arnott, IT
Gary Codner, Engineering
Pam O'Connor, Law
Cristina Varsavsky, Science

Colleagues in Statistical Consulting Services (in particular Neil Diamond, Ewa Sztendur), the Centre for Population and Urban Research (especially Bob Birrell, Ian Dobson, Daniel Edwards) and , CEET (in particular Gerald Burke, Michael Long, Chandra Shah) for creating meaning from multiple sets of demographic, student and enrolment data;
Colleagues and campus coordinators and PVC's at MUM and MSA;
Members of the Ethics working party who have shown a wonderfully cooperative spirit singularly focussed on improving teaching and learning of ethics, irrespective of faculty or discipline constraints;
Finally, and most importantly, the members of the EPIC team – Jan Schapper, Susan Mayson, Helen Fletcher-Kennedy, Jeffrey Bender, Katharina Franke, Yolande McNicholl, Kate Carney and Marion Bonnici. They have worked tirelessly and shown a commitment and dedication rarely seen. Jan and Sue's work on research-led teaching, Jan, Sue, and Yolande's work on IoC, and Jeffrey and Helen's support in all matters ranging from project management, pulling together large amounts of information to drafting/editing reports has been outstanding, not to mention the challenging tasks of managing people's anxieties and expectations. Thanks also to my two PAs – first Kate and now Marion – for putting up with me.

Ultimately, any error of fact, ambiguities, misinterpretations, gaps and omissions are my responsibility alone.

Heinz Kreutz
December 2007

EXECUTIVE SUMMARY

The Monash University Review of Coursework was launched in late 2006. A temporary directorate was formed under the auspices of the then Senior Deputy Vice-Chancellor, Professor Stephen Parker. The new unit – Education Plan Implementation Corps – was tasked with the initial phase of the implementation of the university's Education Plan 2006-2010. Several themes and tasks were given priority for 2007 – Employability and Graduate Outcomes, Graduate Attributes, Internationalisation of the Curriculum, Ethics, Research-led Teaching and, most significantly, a top-level Review of Coursework.

Initial priorities for EPIC, as outlined in the Education Plan have been:

- Helping graduates become ethical, engaged and employable global citizens capable of addressing the theoretical and practical challenges of the future
- Ensuring that Monash courses are relevant and responsive to student and key stakeholder needs
- Establishing an international focus in all coursework programs
- Promoting research-led teaching and learning

From the outset, the work of EPIC was characterised by a need to balance a wide variety of views, needs and expectations from across the Monash Faculty and Campus networks. Also, the Monash Education Plan and the Review of Coursework had to take place in a particular Higher Education context and, more specifically, against the backdrop of the so-called Melbourne Model.

At an early stage of the Review, consideration was given to strengthening the role of the honours year and changing the Monash course delivery structure to a four-year honours default degree. This was, however, rejected by faculties and the brief changed to exploring and highlighting internal strengths, and the choices and opportunities that Monash affords its students. These have been articulated through a set of principles which underpin undergraduate education at Monash and a course delivery architecture which remains consistent with the current schedule of qualifications but places an increased emphasis on integration, pathways and collaboration between and across faculties.

Coursework Principles

- Choice
- Breadth & Depth
- Transferability
- Cross-boundary Mobility
- Creation of an Optimal Learning Environment

Section 4 (Vol. 1) provides a conceptual framework and a set of principles around the Review of Coursework. The five coursework principles are, therefore, premised on the assumption that Monash University does not wish to drastically restructure its education, but rather draws a distinction between broadening and deepening capacity, where broadening is concerned with doing more of the same, but better, and deepening about enabling the system to engage in new initiatives. This dual approach based on depth and breadth appears to reflect Monash most accurately. In other words, the proposition is not to blindly follow some ill-defined

diversity agenda (and, more recently, an “education revolution”) imposed from above, but to do what we do even better, and at the same time look for new opportunities.

The principles should underpin our coursework programs. To ensure this they need to become an integral part of the ongoing education policy revision, course approval and review processes. The principles should serve as touchstones for new coursework policies, new courses and, indeed, old courses as and when they are reviewed.

For example, in 2007, 2.64% (25 out of 946) of all ‘active’ courses accounted for 50.77% of all enrolments. Furthermore, 20.1% (214 out of 1064) of ‘active’ courses have had zero EFTSL over the last 3 years. In such an environment, the need to streamline, and make more relevant and efficient our education and delivery of coursework also needed to be recognised. Indeed, no faculties have opposed the concept of curricular rejuvenation and a considered reduction of units. Considerable progress both at the graduate/postgraduate and undergraduate level is being made in this regard, especially in the Faculties of Business & Economics, Medicine, Nursing & Health Sciences and Arts.

Course Delivery Architecture

The course delivery architecture while consistent with the current Monash Schedule of Qualifications encourages greater emphasis on integration of the current qualifications both within and across faculties and disciplines through a more collaborative framework; and through a focus on opening and developing pathways between qualifications. The Honours year is emphasised both as the capstone of the undergraduate experience and the bridge to postgraduate research.

To achieve this key areas to be addressed include:

- Content duplication
- Ease of transferability
- Course rules and structures (These need to be reconsidered from an ‘enabling’ perspective – ie, do they allow students the greatest freedom of choice, breadth and depth etc. in line with principles)

Graduate/Postgraduate Coursework

At the graduate and postgraduate coursework level, the above principles hold in relation to what and how to study. Through the application of these principles within the context of the collaborative coursework delivery framework the focus at this level will be on delivery of a limited suite of high quality courses. These should be aligned to:

- Areas of research strength;
- The ever-changing context of interdisciplinarity; and
- Employability expectations and the ongoing demand for skills deepening.

Curriculum

A thematic approach was taken in relation to the curriculum. Research-led Teaching, Employability and Employment Outcomes, Internationalisation of the Curriculum, and Ethics and Generic Skills all provide thematic perspectives through which the curriculum has been re-examined.

Research-led teaching (RLT)

The key findings from the RLT report are:

- RLT (research-led teaching) is what distinguishes a university education;
- RLT grounds students in the culture and ethics of scholarship;
- RLT needs to be supported and resourced at all levels of the university because it provides mutual benefits for students, academics and the university as a whole. Learning is the outcome that both research and teaching share in common;
- RLT contributes to improved learning outcomes through greater attention to student-centred approaches to teaching;
- RLT contributes to students' ability to cope with a complex and knowledge rich work environment by developing their research and inquiry skills in a process of continuous learning;
- RLT approaches to teaching and learning assumes that research and inquiry skills are developed through processes of continuous learning from first year undergraduate level through to honours and postgraduate study;
- Negotiations over the definition and operationalisation of RLT should be guided by a set of university-wide principles but conducted at the level of the faculty, discipline and individual academic.

Policy recommendations, including a set of university-wide principles, are proposed in line with these findings.

Employability, Employment Outcomes and the Skills Shortage

The Review of Coursework documentation contains two detailed and comprehensive discussion papers on the skills shortage and the relevance of employability in higher education. The research and literature review in particular highlight the considerable theoretical and ideological challenges ahead, and how universities will respond to the growing calls for more relevance, improved employment outcomes and meeting the skills shortage. Further work, including a large scale survey of employers (national and international; n=1340), staff (n=288) and students (n=6400), has been conducted about needs and expectations in regard to the importance and relevance of the link between education and desirable employability outcomes.

The importance of the nexus between employability and higher education also transpires in other research, such as the analysis undertaken by CPUR on behalf of EPIC on the characteristics of Monash University undergraduate students which concludes that "Monash may have to extend the range of relatively prestigious vocational course offerings at the Clayton and Caulfield campuses if it is not to lose some of the high performing applicants to such courses offered at less prestigious universities." (p. 14). This view is also supported by a recent study conducted by CEET on behalf of the Victorian State Government³. The report addresses future employability and skills demands and projects needs over the next fifteen years until 2022. While there is clearly a case for both the university and the VET sector to address the issue, it is interesting to note that the authors highlight the importance of 'skills deepening'. In this context they make the significant observation that "Employment will grow more quickly in higher skilled occupations than in lower skilled occupations" and project that

³ The report by Shah, Cooper and Burke (August 2007) was prepared for the Office of Training and Tertiary Education, Department of Innovation, Industry and Regional Development. .

“More workers will have higher level qualifications. The numbers with higher education qualifications will increase by 52.5 per cent.”(p.4).

The staff survey confirms that staff increasingly accept the need to teach beyond the traditionally “academic”: 85% agree that there is a need to provide a balance between the practical and theoretical, and 76% agree that internships and practical learning experiences are either important or very important.

Whether Monash needs to introduce new disciplines in order to address employability and the skills shortage, is a complex question. There are existing gaps, and new disciplines like dentistry or veterinary science may be considered. Research shows a growing demand, and enrolment in these disciplines have increased in recent years and are expected to continue to grow. The Monash Campus network may provide an advantage in terms of locating new disciplines at its urban fringe where there is strong demographic growth, or on rural campuses.

Internationalisation of the Curriculum

The current Monash approach to IoC, while laudable and enshrined in policy, is poorly implemented across the university, with some evidence of systematic action towards IoC in some faculties (especially Medicine).

The key findings of the IoC report are as follows;

- IoC acknowledges that the world of work and professional engagement faced by students is characterised by global connectedness and networks of multi-lingual, multi-cultural and multi-ethnic networks;
- IoC prepares students with the competence to navigate cultures and languages different from their own so that they become true global citizens;
- IoC enhances students’ ability to cope with greater complexity in the application of knowledge across disciplines and in diverse contexts;
- IoC may be described and operationalised in a myriad of ways that enhance students’ international experience, knowledge of diverse cultures and competences to solve problems in a variety of locations and cross-cultural contexts.

Recommendations which emphasise implementation of the existing policy and principles are made.

Ethics and Generic skills

The “Ethics and the Generic Curriculum” project has unfolded in three stages. Stage 1 involved scoping and reviewing current practice at Monash University and a mapping of existing teaching activities. Stage 2, which is in progress, involves the re-development of an existing undergraduate unit “Ethics at Work”, to be available to students from all faculties. “Ethics at Work” is a cross-discipline curriculum project which creates unit content including both generic aspects of ethics, and embedded, discipline specific modules. Stage 3 will deal with implementation and involve the cross-indexing of multi-discipline content, drafting of selection rules and determination of content thresholds. The Ethics Working Party has recommended that, in keeping with the Education Plan objective, and the nexus between ethics, employability and internationalisation, Monash graduates should have been exposed to a minimum of ethics content of no less than one 6 credit point unit, or its equivalent. This may mean a single unit such as “Ethics at Work” with 100% ethics content, or several units with partial ethics content.

We argue that there is a need to re-think the balance between the teaching of academic and generic skills, and how the modern curriculum should be structured. Employers, staff and students recognise the importance of generic skills, such as communication, teamwork, interpersonal skills, analytical and problem solving skills and highlight the importance of understanding ethical principles.

Implementation

While this project is ostensibly about teaching and learning at Monash University, it is clear that to shift from policy formulation to implementation requires not only resources but also considerable behavioural change from faculties, departments and individual staff. The potential additional burden of the implementation of the Education Plan and the Review of Coursework needs to be carefully considered. If it is perceived by faculties as yet another compliance task demanded from the centre, research on the experiences of large-scale institutional change suggest there is a poor chance of success. It is essential then for the successful implementation of the Education Plan and the Review of Coursework that resources be committed to minimising resistance.

All in all, though, the Review of Coursework has been a very positive process which has received excellent support from stakeholders, and support from Associate Deans (Education) and their colleagues at Faculty level, in particular, has been outstanding. As a consequence, there are many positive outcomes, and the many findings contained in the body of the report (Volume 1) and appended in [Volume 2](#) are indicative of the size and complexity of the task.

Finally, it needs to be stressed that there exists a remarkable sense of pride and identity among Monash colleagues. Many staff have provided very positive input and declared their commitment to the university. At the same time, there is a noticeable sense of disquiet among teaching staff. Objections against a prevailing compliance culture have been raised frequently, sometimes in relation to faculty administrative processes, but more vocally directed against central management. It is not within the parameters of a review of coursework to offer a solution to this issue, nor is it within our brief to make recommendations as to how the problem may be addressed. However, and because the current situation has the potential to negatively impact on the quality of education, we feel it incumbent on us to state the observation and suggest that institutional leaders consider a response in an attempt to overcome the current level of disengagement and disconnect between the management and teaching staff.

LIST OF RECOMMENDATIONS

It is recommended that,

- R1. Monash University endorse the Integrated Course Delivery Model as outlined in Section 5, and encourage all faculties to conform with this model, where possible. The model aligns with the university's major strategic directions; in particular education underpinned by research strength and internationalisation, and is consistent with the current Qualification Categories Policy.
- R2. transition and progression pathways be emphasised and strengthened; in accordance with the Integrated Course Delivery Model (Section 5).
- R3. Monash University reconceptualise the honours curriculum in all faculties to facilitate more effective transition into HDR.
- R4. the recommendations of the 2007 Review of Monash College be considered by Faculty AD-Es and Education Committees.
- R5. Monash University introduce and encourage Associate Degrees at Gippsland and Berwick Campuses, and explore further the need for alternative pathways at other campuses.
- R6. Monash University distinguishes more clearly postgraduate coursework and research degrees.
- R7. Monash courses reflect a balance between student and employer expectations and academic integrity and canon.
- R8. a more inclusive learning environment be developed at Monash University with the introduction of a collaborative curriculum development and teaching framework across faculties and disciplines:
 - a) A 'collaborative teaching' working party to be convened and a reward system and incentives created to encourage faculties to participate.
 - b) By 2010, half of Monash University courses to have a collaborative element of a minimum of at least two units, but preferably a minimum requirement of at least one minor sequence from another faculty.
- R9. a taskforce be established to develop a collaborative 'coursework arrangements policy'. It is recommended that the taskforce report both to the ODVC-E and ODVC-I and provide recommendations and advice on the alignment of collaborative coursework arrangements with university objectives across disciplines, faculties, campuses and with national and international partner institutions.
- R10. Monash University embrace the values of choice, breadth and depth, transferability, cross-boundary mobility and the creation of an optimal learning environment as its underlying principles for the delivery of quality education (Section 4).

- R11. Monash University introduce a greater proportion of generic first year content in faculty and discipline curricula, with a view to sharing embedded content across cognate disciplines. In 2008, embedded generic ethics and a complementing 'Ethics @ Work' service unit to be made available to all Monash students.
- R12. Monash University re-conceptualise the nature of minor and major sequences with a focus on the desired student outcomes and competency standards.
- R13. a clearer distinction be created at the undergraduate level between education at first year (general), second year (consolidation) and third/fourth year (culmination) level.
- R14. every course offer students at least one 'capstone' experience, either through 'deep' major sequences in selected disciplines, or practical learning experiences outside the traditional academic context.
- R15. faculties encourage students to enrol in at least one unit outside their home faculty during the course of their undergraduate degree.
- R16. by 2010, all Monash Courses have a 'practical learning' component (practicum, work experience, internships, practical modules embedded in existing curricula, and the like), to provide every student with an opportunity to benefit from industry experience.
- R17. Work-Integrated Learning (WIL) form the conceptual framework for a new nexus between pedagogy and professional praxis, as a joint initiative involving Employment & Career Development and Monash Professional.
- R18. Monash University, through the EPPC Unit Coding Protocols Working Party, unify procedures and introduce a system of unit coding and course points which is internally consistent across the entire Monash network.
- R19. Monash University, through the Assessment Working Party, revisit the relationship between credit points and assessment, and study workload.
- R20. every Monash course reflect the three generic institution level Graduate Attributes of *internationalised*, *research-led* and *communication competent*.
- R21. Monash University develop an implementation plan for the embedding of the new Graduate Attributes in existing and new curricula to guarantee that, by 2012, all Monash Graduates will have acquired, as a minimum condition, the three institution level Graduate Attributes. A Working Party reporting to Education Committee and led by CALT will oversee the implementation process. The Graduate Attribute implementation plan should include clear guidelines as to the delivery and assessment of the Graduate Attributes.

- R22. Monash University subsume the notions of effectiveness and efficiency of education under a more broadly conceptualised 'sustainable education' approach.
- R23. the extent of duplication in content and/or delivery of units across the undergraduate curriculum, both within and between faculties and campuses, be identified and mapped, and the impact of zero enrolment courses scoped.
- R24. the number of units and courses be capped or reduced to reflect, and add focus to, the university's vision, mission, and priorities as expressed through central and faculty-based planning documents:
- a) Monash University have a greater focus on fewer courses with several programmes rather than different courses,
 - b) faculties set an enrolment threshold for all courses based on costing/profitability models. Courses below the threshold to be disestablished, reconfigured or merged with cognate courses,
 - c) discontinue, reconfigure or merge where possible units with an enrolment of
 - i. < 30 students at 1st year (3.75 EFTS),
 - ii. < 20 students at 2nd year (2.5 EFTS),
 - iii. < 15 student at 3rd year (1.875 EFTS)(Note: figures expressed in EFTS assume 6 credit point units).
- R25. a review of current unit and course approval processes be conducted, with special attention given to campus matrix models and multi-campus policies. Campuses to be given more flexibility and scope to develop localised content based on local campus expertise and local need.
- R26. the constraints of timetabling and room allocation on effective and high quality teaching be examined more closely and removed wherever possible.
- R27. Monash University introduce a scheme where all courses are subject to a desktop review on a five-year cycle, consistent with the recommendations of AUQA. A 'sunset' clause to be introduced where any course not reviewed after five years is automatically disestablished.
- R28. Monash University introduce or revise, policy and procedures on naming of degrees and courses.
- R29. Monash University faculties develop a matrix identifying education responses to the future skills shortage per faculty/discipline.
- R30. Monash University offer a defined number of high quality professional/vocational degrees and modules which align with the perceived skills shortage.
- R31. Monash University add an 'education strand' to the student experience network/framework (to be inclusive of the effect of learning and teaching on general student experience; retention/attrition).

- R32. Monash University re-emphasise its unique strength in the delivery of quality education through double degrees. While permitting exceptions on strategic grounds, student choices to be limited to double-degree combinations involving:
- i. Generalist-generalist DD (e.g. Arts- Science)
 - ii. Professional-generalist DD (e.g. Arts-IT, Science-Engineering).
- R33. Monash University adopt the follow definition of ‘employability’:
Employability may be defined in various ways, but implies the acquisition of traits that secure employment, and a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment – locally and globally - and be successful in their chosen occupations, which benefits themselves, the workforce, their communities and their countries.
- R34. Monash University explore in more detail the connection between attrition, retention and employment.
- R35. Monash University develop a detailed implementation strategy for the introduction of the new – generic and employability-relevant - graduate attributes into the curriculum. The implementation strategy should make reference to the connection between attrition/retention and employability.
- R36. Monash University engage in more detailed institution-internal longitudinal research on graduate destination and employability in order to generate more meaningful data and to overcome the inadequacies of GDS data. In particular, better instruments for the long-term assessment of employability need to be developed.
- R37. Monash University allocate the necessary resources for the introduction of an E-portfolio scheme for students in order to facilitate tracking of generic skills and attributes (jobs ‘kitbag’), including:
- a) Identification of skills-sets needed for Life-Long-Learning.
 - b) Making more ‘overt’ use of employability skills.
 - c) Pursuing a policy of embedding generic employability skills in the Monash curriculum inasmuch as possible.
- R38. Monash University as part of its curriculum approval and review processes, audit the use and integration of employability skills in course materials.
- R39. Monash University encourage stronger liaison between faculties, disciplines, and Careers and Employment through appropriate representation on the Employability and Employment Outcomes Committee (E&EOC):
- a) The E&EOC should set the university’s employability agenda, and work with faculties and disciplines to develop an E&EO framework.
 - b) The E&EOC should consider special initiatives in relation to international employability.
- R40. Monash University develop a set of benchmarking instruments to measure the extent of ‘practical learning’ against other leading institutions.

- R41. Monash University encourage stronger liaison between E&EOC and CHEQ in order to develop a survey instrument WEQ (Work Experience Questionnaire) for discipline clusters with strong industry and professional links. WEQ may be developed as a subset of CEQ, or a stand-alone survey tool.
- R42. Monash University introduce appropriate curriculum initiatives aimed at incorporating authentic workplace experience in the curriculum.
- R43. Monash University encourage stronger liaison between E&EOC and Advancement in order to bridge existing gaps in the area of community engagement.
- R44. Monash University consider the establishment of a Community Engagement Framework which connects research and education to the broader community.
- R45. Monash University develop a policy position on the nature of its institutional response to the skills shortage (see also R29 and R30).
- R46. the following definition of Research-led teaching be adopted by Monash University: *Research-led teaching and learning are based on the principles of scholarship that involve enquiry, discovery and application of knowledge. In this spirit, the university supports student-centred learning and encourages the integration of the processes (knowledge creation) and products (research outputs) with the processes of teaching and learning.*
- R47. Monash University support strengthening the links between research and teaching across the university.
- R48. Monash University support research-led (discipline-based); research- oriented (enquiry skills); research-based (enquiry-based activities); research informed (pedagogic informed) teaching as just a few exemplars of the link between student learning and research.
- R49. Monash University encourage all faculties to develop and support education and research policies that make explicit the link between research, learning and teaching, in particular for undergraduate students.
- R50. Monash University, in consultation with the faculties, will develop university-wide key performance indicators to measure the progress of Research-led teaching strategy implementation.
- R51. Monash University, in its support for research-led teaching, value excellence in research and teaching in all academic staff.
- R52. Monash University acknowledge there is no “one best way” to embed research-led teaching across all faculties.

- R53. Monash University acknowledge that all students and academic staff, despite their different experiences and levels of expertise, are members of the Monash learning community.
- R54. in view of R53, at Monash University, all academic staff, regardless of level, are encouraged to engage in research and teaching. Staff may either become personally engaged or contribute by way of mentoring colleagues (eg. high profile researchers).
- R55. all undergraduates of Monash University, regardless of their course can expect at least one opportunity to actively engage in enquiry-based learning, appropriate to their subject discipline.
- R56. the link between research and teaching will be achieved by the development of curriculum that encourages student engagement with research, scholarship and consultancy activities. This is of particular importance for undergraduates and postgraduate coursework students.
- R57. Monash University support the development of human resource management policies (such as recruitment, appointment, promotion, performance management, professional development) that prescribe the link between research and teaching.
- R58. Monash University support the establishment of a reward system for academic staff that requires a demonstration of minimum levels of quality in both research and teaching.
- R59. a committee of Academic Development to be established by the University's Academic Board to co-ordinate and support faculties' initiatives to strengthen the link between research, teaching and learning.
- R60. as far as is practicable, all Chief Examiners of all units to be research-active academics.
- R61. in the first year units of undergraduate courses, teaching teams include a reasonable mix of academics who are specialists in teaching and learning, research and both research and teaching.
- R62. each subject discipline or department establish a team of academic staff with expertise in pedagogical issues in higher education. It is the role of this group of staff to evaluate all new unit/ course applications as well as unit/ course reviews.
- R63. all undergraduate and postgraduate students have been required to undertake at least one research project appropriate to their discipline of study.
- R64. all undergraduates have undertaken at least one assessment task that requires knowledge and understanding of research processes within their selected major.

- R65. all courses (undergraduate and postgraduate) include at least one lecture per annum from a Level D or Level E academic, preferably about their research outputs and/ or their processes of enquiry.
- R66. all Honours programmes involve at least one research methods unit.
- R67. all postgraduate courses (except where professional accreditation precludes this) include an elective on current research outputs (ie. research on contemporary issues).
- R68. on-line unit evaluations and MonQuest evaluations include student responses to their experience of research processes and/ or products.
- R69. all units and courses be regularly reviewed by a team of discipline “experts” to ensure currency of knowledge, approaches and debates in the discipline.
- R70. all successful applicants to the university’s teaching and learning fund will be required to submit a paper for publication as one of the project’s expected outcomes.
- R71. applicants for Carrick Institute Awards to be encouraged, where practical, to identify and/or develop a research project from their teaching and learning practise.
- R72. no unit be taught from a text-book only; all units to provide supplementary scholarly readings.
- R73. all departments offer at least one seminar per year to showcase undergraduate student research and enquiry.
- R74. where deemed desirable, each research team of more than three academic staff or on an externally-funded project of more than \$100,000 to appoint an adjunct staff member (to be included in their teaching workload) to develop relevant curriculum from the research teams’ research findings.
- R75. where possible, research conducted by Monash researchers be used to inform the content and/ or development of new units and/or courses.
- R76. where possible, internal research grants be made available within faculties for pedagogy-based research relevant to the discipline.
- R77. all on-going ‘teaching and research’ staff appointments be required to demonstrate experience in both research and teaching with demonstrated excellence in either, relevant to the vacant position.
- R78. all on-going academic staff appointments as far as is practicable, require staff regardless of level, to teach a minimum of 12 hours per annum, preferably spread across undergraduate and post-graduate level.

- R79. professional development training in research and teaching and learning be made available to all academic staff.
- R80. one criterion for promotion include attendance at, or delivery of, at least one professional development activity on both research and teaching and learning within three years prior to application.
- R81. preference be given to the employment of sessional teaching staff with Masters' and PhD degrees (or their equivalent).
- R82. all students enrolled in HDRs be encouraged to undertake sessional teaching duties.
- R83. where practicable, all sessional teaching staff be encouraged to enrol in HDRs.
- R84. Monash University confirm that at Monash *Internationalisation of the Curriculum means the provision of curricula, pedagogies and assessments that foster understanding of national and global perspectives, and of how these intersect and interact with personal perspectives. Learning experiences at Monash will develop students' ability to engage with multiple frameworks, contrasting value-systems, and open-ended situations.*
- R85. that the policies and procedures of the Internationalisation of the Curriculum be reaffirmed.
- R86. a Working Party be established to develop appropriate criteria to measure the progress of the implementation of internationalisation of the curriculum policies and procedures in all faculties, taking into account the implications of IoC in different disciplines

In light of R84, R85 and R86 in particular, it is recommended that the following principles are used to guide the implementation of Internationalisation of the Curriculum at Monash University, having due regard to the fact that Monash University needs to further strengthen its commitment to enhancing students' international experience by:

R86 cont'd:

- a) providing an international learning experience to local students.
- b) providing a local learning experience to international students (facilitate local content as an international experience for international students).
- c) providing access where deemed appropriate, to specialised curriculum content for international students.
- d) ensuring that our curricula provide content with parts offered off-shore by local faculty members.
- e) strengthening its emphasis on international interdisciplinary content.

- f) facilitating greater exposure to curricula that specifically address cross-cultural skills.
- g) offering curricula that add a comparative (international) dimension to a traditional context.
- h) incorporating curricula with international content (i.e. non-adapted content).
- i) providing internationalised content (i.e. adapted content).
- j) providing enhanced opportunities for the formation of international learning communities.
- k) providing stronger connections between teaching and international research; and combine more stringently research, curriculum development and internationalisation.
- l) creating curriculum content promoting the ability to solve problems in a variety of locations and cross-cultural settings.
- m) creating curriculum content enabling students to work with people who are culturally diverse.
- n) creating curriculum content enabling students to develop skills to live and work in a changing globalised world.
- o) offering, wherever possible, a curriculum that has an international career orientation (e.g. curricula leading to internationally recognised professions).

The following policy recommendations (R86p-cc) create a context for future benchmarking and further recognise, and strengthen, Monash's position as one of the leading international universities in Australia and globally. It is recommended that this be achieved by

- p) establishing a task force on language and learning capacity and usage which, through the use of suitable survey tools and the involvement of CHEQ, gather data on existing practice and intercultural potential.
- q) expanding the 'BA (Global)' to other faculties. In particular, double-degree combinations involving the BA should be augmented to include the BA (Global).
- r) increasing the proportion of foreign language courses and units in relation to the total number of course and units on offer.
- s) increasing the proportion of EFTSL in foreign language units in relation to the total number of EFTSL in non-foreign language units taken.
- t) increasing the number of foreign language teaching hours per week (all languages).

- u) augmenting its student mobility scheme with stronger emphasis on participation by non-English speaking institutions and countries.
- v) should continue to increase the number of teaching staff from diverse linguistic and cultural backgrounds.
- w) auditing and increasing the number of places offered in programmes for international application training in relation to the total number of students.
- x) increasing the number of places offered in programmes providing information about countries/cultures/societies in relation to the total number of students.
- y) Further analysing, in order to draw on its considerable 'inter-cultural capital', enrolment and pathway patterns of graduates of foreign nationality.
- z) further disseminating data (attrition, pathways, performance) on the proportion of graduates of foreign nationality in relation to the total number of graduates.
- aa) collecting further data on the ratio between international first-year students and graduates of a given starting year of studies.
- bb) establishing processes, perhaps through its alumni network, for collecting information and tracking international engagement and employment of graduates.
- cc) encouraging cross-faculty initiatives between the Faculty of Education and the Faculty of Arts in order to address identified skills shortages in a number of LOTEs.

1 INTRODUCTION

This report outlines the work undertaken in 2007 by the Education Plan Implementation Corps (EPIC) in regard to the implementation of the Monash Education Plan. The report is presented in two volumes available at:

<http://www.monash.edu/teaching/epic/>

The Monash Education Plan 2006-2010, which together with the University's International Plan and Research Plan form the Academic Plan 2006-2010, has identified several key areas of investigation for 2007:

- An institution-wide Review of Coursework;
- Internationalisation of the Curriculum;
- Research-led Teaching;
- Employability and Employment Outcomes;
- Institution-level Graduate Attributes;
- Generic and cross-discipline curriculum development;
- Pilot project on the teaching of ethics across faculties and disciplines.

While the Review of Coursework has been the main focus of our attention, it needs to be stated that the themes listed above are inseparably linked and difficult to examine as discrete entities. The first five have been funded from a special projects budget established under the auspices of the former Senior Deputy Vice-Chancellor, the latter two are part of successful education initiatives small grants.

Coursework reviews traditionally ask the fundamental question of how well an institution's education aligns with its priorities and principles. They are also motivated by an institution's desire to be effective and efficient in its delivery of education. In this respect, the reasons for the RoC are in part derived from the University's longer term strategic thinking. An institution-wide review provides an opportunity to apply a different lens to the architecture and qualifications framework at Monash than if faculties conducted their own reviews in isolation.

Structure of the Report

Volume 1 of the Review of Coursework report is structured around the methodology outlined below (3. Methodology and Process). At the same time, the report contains several sections of a broader nature which explore some of the more fundamental issues affecting education and institutional governance structures. Section 2 deals with the broader context of the Review of Coursework, summarises a set of overarching principles and briefly touches on a number of issues and challenges encountered during the process. It is important to note that the principles by and large reflect existing areas of strength which Monash clearly has. There are instances of existing practice which without doubt enhance our education and provide us with a distinct reputational advantage over other institutions, such as double degrees. In addition, our remarkably broad spectrum of offerings is an important point of distinction.

Section 3.3 and 3.4 discuss the rationale for the recommendations proposed and are the centrepiece of volume 1. A significant amount of data and information and key

findings have been listed here. However, for a comprehensive account of our findings it is strongly recommended that full reports in [Volume 2](#) are consulted. There are also some interesting revelations: our background work on employability and the detailed investigation into research-led teaching are the most up to-date accounts available and are replete with current accounts of very complex subject matters. It is hoped that the findings will guide strategy and policy development and provide new impetus to curricular innovation. For example, the new Federal Government's rhetoric on an imminent 'Education Revolution' may set new directions perhaps away from the earlier 'diversity agenda'. The Government's lucrative 'National Priority Scholarships' will be offered to students in fields with labour shortages such as teaching (esp. science and maths), nursing, dentistry, allied health professions and engineering. The analyses and findings of EPIC's work on education and employability outcomes fits well into this new context.

In addition, we have consulted widely with colleagues and students, through surveys, workshops with Faculty Deans and Associate Deans (Education), meetings and discussions with ADRs, serving on a number of committees (as chair and member) ranging from the unit coding protocol working party of EPPC, to the employability and employment outcomes sub-committee of Education Committee, as well as the Learning and Teaching Quality Sub-committee of Education Committee. Many individual meetings were held with individual colleagues in leadership positions (ADRs, Deputy Deans, Heads of School, Campus Directors and PVCs) and with representatives from student organisations (MPA). Separate campus visits to Berwick, MSA and MUM were undertaken. Also, EPIC has tapped into several university networks by virtue of the director's office as Associate Dean (International, Faculty of Arts) and his previous four years as AD-E in Arts.

2 CONTEXT AND BACKGROUND

During its nearly fifty years in operation, Monash has evolved into a complex network of faculties, campuses, disciplines, centres and institutes, as well as administrative support structures and corollary networks. From this complex set of relationships we can extract distinct advantages and opportunities because we are unique where others are not. However, our distinctiveness also predisposes us to a number of risks and challenges: more recently questions have been raised as to whether the Monash approach to education is sustainable and, perhaps as a consequence of its multi-nodal and distributed structure, whether the university is in danger of becoming a polytechnic which is trying to be everything to everyone. It is worth noting that the current educational structure of Monash is generally perceived as being the result of evolutionary adaptation, and not long-term strategic planning. Coordinated and institution-wide strategic planning at Monash has only been a relatively recent occurrence, especially since the institutional self-review of 2002. It is therefore not surprising that whilst we have had a comprehensive review of research, there has not yet been an overall review of our educational programs.

That this is the first comprehensive review of courses at Monash is a remarkable state of affairs for an institution that offers more than 900 courses and nearly 7000 units. To illustrate the complexity of the education programs, it is worth noting that almost 20% of undergraduate courses and 16% of units are offered from more than one teaching location. Many units have multiple deliveries, are offered through duplicated teaching events, and have multi-level and cross-listed codings. On each of its campuses, Monash caters for large enrolments and/or different modes of delivery including day, evening, on-campus and off-campus. Amongst the 7000 units, over 30% have prohibitions with other units. This unhealthy number of prohibitions may be indicative of significant content overlap and duplication across a significant minority of the units. Further, a wide range of entry standards, ability levels, culture specific learning styles and prior educational experiences add a further dimension to the complexity of education at Monash. For example, our analysis of recent course and unit enrolment data (2005-2007) further reveals significant imbalances in that in 2007, 25 courses out 946 (2.64%) accounted for 50.77% of total enrolments. Furthermore, there are 214 out 1064 (20.1%) active "courses" which have had zero EFTSL over the last 3 years.

The impetus and motivating questions for the Review of Coursework, the centre piece of EPIC's responsibilities, were derived from a SDVC discussion paper in May 2006, and the Monash Academic Plan. The Academic Plan, and more specifically the SDVC's suggested approach for a comprehensive Review of Coursework, were endorsed by the University Community and through the relevant governance structures (i.e. Education Committee, Academic Board).

As a consequence, it was suggested that Monash must

- ensure that, as an institution, it looks ahead at global trends and is equipped to operate in different markets with different needs.

- ensure its competitiveness with universities in its main countries of importance (Australia, Malaysia and South Africa).
- take on issues that no single faculty could take on in its own academic and course reviews. To put it differently, if by coincidence all 10 faculties conducted complete reviews of all its educational and related activities at the same time, there would still be some major issues of significance to the whole University which would not realistically, nor efficiently, be dealt with because no single faculty would have the information or perspective to do so.
- ensure that our students have the maximum choice and flexibility in their programs, consistent with maintaining coherent courses of study and the acquisition or refinement of a deep understanding of at least one discipline.
- assist in the development of discipline profiles which outlines a modern analysis of traditional and emerging disciplines, our coverage of those disciplines and areas which we might move out of or into;
- enable students to make maximum use of the diversity that is Monash. Students must therefore be enabled to make choices and enjoy a high degree of flexibility in their programs; and
- continually assess and reassess if its education (courses and units) is coherent and relevant. The principle of relevance is connected with discipline balance and profiles, which should espouse traditional approaches and emerging trends.

The list has since been further refined and, because the Review of Coursework is organised around the key themes of *Monash Directions 2025* and the *Academic Plan 2006-2010*, the basis for the guiding questions of the review have been a generally agreed need to

- a) attract and retain the most able students from around the world;
- b) help students graduate equipped to become ethical, engaged and employable global citizens, capable of addressing the theoretical and practical challenges of the future;
- c) facilitate a relevant and balanced learning experience;
- d) create a more collaborative unit and course development and delivery framework, across our faculties and disciplines;
- e) create a framework for the delivery of education that is efficient; and as a consequence, will contribute to the rationalization of courses and units in identified areas and well-understood contexts in order to achieve relevance and efficiency.

It is worth noting that the discourse of efficiency and rationalisation was given added emphasis in the first half of 2007, and communicated via the Office of the DVC-E

(Acting), as the project progressed. Faculties, in particular, expressed concern about a perceived lack of understanding of how notions of efficiency should be measured. The Faculties' view is not unique. The introduction of this managerial discourse into public education is found across all Western economies, as universities respond to the growing financial and social pressures placed on higher education systems. Various descriptions of managerialism, academic capitalism and/or the commodification of education, questions are raised in this report as to the efficacy of such concepts at all in a higher education context. Notwithstanding the tensions between efficiency (a measure of the relationship between inputs and outputs) and effectiveness (a measure of quality of the outcome), the recommendations in this report are predicated on the need to shift the university's focus towards a more 'sustainable' model of education. The concept of sustainable education is used in the context of this report as the expansion of the conceptual realm of education into adjacent domains of research, knowledge production and delivery. Education, like other subsystems that have to balance the practical (e.g. employability) with the ideal (social responsiveness, community engagement, knowledge for knowledge's sake etc.) is no longer able to ignore the fundamental question of relevance. This is discussed in more detail in Section 6.

Curriculum reviews also look at processes and structures that are needed to guarantee the delivery of appropriate, relevant, quality and up-to-date education. The challenge is that in an institution as large and complex as Monash, there will not be unanimous support for strategic plans and visions understood as being developed and distributed from the university's centre. To an extent, this is an inevitable consequence of institutional planning, especially in an ever-changing context where Higher Education has to function in an increasingly difficult and competitive environment. Higher Education is now governed and pushed along by complex internal and external factors, for example:

- there is a chronic public funding shortage and universities now rely more than ever on external revenue and, especially in the case of Monash, where international student fee income forms a significant part of our revenue.
- the demands of having an 'international presence' are greater than ever. While Monash is generally seen to have a stronger international presence than most of its competitors, the situation is changing rapidly. Especially Asian and European Higher Education providers are growing at a rapid rate.
- some international trends (e.g. the Bologna process in Europe) are redefining Higher Education on a global scale.
- the relevance of education in the knowledge economy/society debate. There is a dominant 'knowledge' discourse (k. economy, society, literacy, etc.) being generated on a scale previously unheard of, both at the superficial rhetorical level (politicians, institutional leadership) and at the deeper level of policy creation and institution change.
- the range of offerings and choices for students raises issues of structural compatibility and pathways, and of compatibility of content (e.g. Melbourne

Model (3+2); VU Model (professionalisation/vocationalisation) or more traditional approaches (Monash 3+1; 4).

- the nature of education and the learning experience in general; e.g. major/minor sequences and breadth vs. depth: is the ‘capstone experience’ as a crowning achievement and culminating experience of deep learning in one discipline still relevant? Or do we need more flexible and innovative thinkers and cross-discipline problem solvers?

There are additional drivers which remain outside the sector’s control, and their significance and relevance shifts and changes as the discourse of public policy and higher education remains captive to immediate needs rather than long-term planning. The current debate on the skills shortage is a case in point.

Within this broad context, coursework principles were developed to underpin the Review of Coursework and ensure that it remained focused on the broader, long-term planning questions posed above and that it not be diverted, due to the inevitable pressure to react, toward current shifts within the higher education environment. These are set out in detail in section 4.

3 METHODOLOGY AND PROCESS

At the time of writing this report, the implementation of the Monash Education Plan and the Review of Coursework remain works in progress. The O-DVC-E has advised that the implementation of the RoC recommendations will be phased in and coordinated by several task forces from 2008.

The RoC project, because of the complexity of the task, does not draw on a single methodology. Nor would this be an appropriate strategy for an institution as intricate, diverse and complex as Monash University which is difficult to grasp in its entirety. The RoC has concentrated on the themes listed above and attempted to create an evidentiary threshold based on background research and discussion papers, surveys, workshops with Deans, Associate Deans and many other colleagues, both academic and general-professional staff. We have also consulted a very large number of internal and external policy and planning documents and drawn on a vast academic literature on topics such as Research-led Teaching and the Internationalisation of the Curriculum. In addition, we have sought input from a range of experts and commissioned statistical analyses to inform our findings and recommendations. As a result, large data sets have been compiled and interpreted, which in turn have underpinned our research questions. We have consulted with faculties and worked across many portfolios – Planning and Statistics, International, Research, Employment and Careers, the Student Experience Network and considered retention and attrition data.

A Review of Coursework Committee, convened by the former Senior Deputy Vice-Chancellor (until January 2007), the PVC-P and Acting DVC-E (February – August 2007), and the new DVC-E (Since September 2007), met on a regular basis during 2007 and acted as a sounding board to EPIC. Until mid-2007 the Learning and Teaching Quality Committee and Education Committee have also served as *de facto* reference committees for this project. The Review of Coursework Committee was disestablished by the DVC-E in early October 2007.

Chapter 3 delivers an evidence base for the Review of Coursework, and sections 3.2 and 3.4 in particular, discuss the type and validity of evidence which has shaped the recommendations. We have been continually confronted with questions of methodology and epistemological paradigm, that is, what counts and should count as evidence.

It is therefore acknowledged that there is no single best method for or type of evidence-based policy research. Even questions that seem purely causal at first glance are embedded within contexts. It is also worth remembering that the main purpose of education research is to influence behaviour, shape attitudes, and to form and underpin policy. It is hardly ever used to develop new theories and paradigms, which is the preserve of the academic disciplines, pedagogues, educational psychologists and the natural sciences in particular.

Evidence-based policy depends on a reasonably clear *research-based* consensus. In higher education, this presents a challenge, because there is no homogeneous and

mutually agreed knowledge base and, as a consequence, consensus is next to impossible at the institutional level where competing demands and expectations need to be balanced. Centrally driven policy compliance and enforcement activities give rise to tensions between Faculties and Management and EPIC, considered a non-discipline/-faculty instrument by many, was forced to explain its role on more than one occasion. During the transition phase from SDVC to the new DVC-E in September, stronger support and endorsement for EPIC from senior management in the Education portfolio would have been beneficial. It is, in fact, my unfortunate duty to report that the delayed delivery of reports and inconsistent quality of data from CHEQ and UPS constituted a significant risk to EPIC's scheduled deliverables. It is only through the remarkable commitment of EPIC staff⁴ and the good working relations with and dedication of, colleagues in Arts (CPUR), Education (CEET) and BusEco (SCS), that certain aspects of the RoC could be underpinned by meaningful analyses and reliable data.

It should further be mentioned that, following directives from senior management (SDVC, PVC-P and DVC-E) the emphasis and focus of the Review of Coursework underwent significant shifts. Research-led teaching and internationalisation of the curriculum were added to the initial mantra of efficiency and rationalisation of courses and course delivery. A further change in direction occurred in mid-2007 with a strong focus on employability and skills shortages. A more recent emphasis has been created in recent weeks by a new discourse which gives impetus to Associate Degrees at selected campuses and greater prominence to Honours. In one sense, this closes the loop and takes us back to where the project began, i.e. with discussion papers and recommendations supportive of Associate Degrees and a compulsory four-year honours degree. Recent decisions are reflective of our earlier approach and slight variations on those themes (i.e. Honours – yes, but not compulsory; Associate Degrees – yes, but in selected disciplines at selected campuses).

A brief comment on the renewed focus on honours as the capstone experience seems in order. Traditionally, Honours is understood to be a final, mastery experience⁵, a culminating experience in which students are expected to integrate special studies with the major, and extend, critique, and apply knowledge gained in their major⁶. Alternative models promote a more continuous and integrated manner where high-performing students are identified and nurtured during their early undergraduate years. Both models have been around for many years and a conceptual shift may be needed to create a stronger link between the more 'academic' nature of Honours and professional 'employability' expectations. If Honours is to become the guiding educational principle at Monash, then it needs to meet a number of tests and, most significantly, address the expectations of students and employers. The conceptual and analytical work undertaken by EPIC, especially the large-scale student and employer surveys, do not readily support a linear 'honours model' for Monash. On the contrary, the data and broader policy contexts suggest overwhelmingly a need to balance academic canon with tangible outcomes.

⁴ Jeffrey Bender and Helen Fletcher Kennedy, in particular

⁵ See Davis, N. J. (1993). Bringing it all together: The sociological imagination. *Teaching Sociology*, 21(3), 233-238

⁶ See Wagenaar, T. C. (1993, July). The capstone course. *Teaching Sociology*, 21(3), 209-214.)

At the same time, we accept that honours is an attractive proposition for many academics as a domain of renewed interest and in-depth academic pursuit (Wagenaar's 'final mastery experience') and an important pathway toward HDR. There is also scope to explore a potential positive employability dimension of a deeper, honours-driven university education facilitating improved employability skills. As such, honours at Monash should be conceived of as an internally driven education initiative aimed at improving the overall quality of students' learning experiences. It must therefore not be allowed to be a reaction to an externally driven market. The new emphasis on Honours has been repeatedly cited in connection with Monash South Africa and its particular relevance to that location. While this additional discursive element adds another dimension to the debate, it is worth noting that MSA, with <2% of all Monash enrolments, is the exception rather than the rule.

The above ambiguities notwithstanding, we submit a comprehensive body of research which draws on many different sources and methods, both quantitative and qualitative. Some of the resultant findings and interpretations are summarised in section 3. below. A full account of all reports is presented in [Volume 2](#). We invite Faculties to disseminate the findings to suit their purposes.

3.1 BACKGROUND DOCUMENTS

The following key Monash University documents provide the background context within which the Review of Coursework has been conducted:

[Excellence and Diversity: Strategic Framework - 2004-2008.](#)

[Monash Directions 2025.](#)

[Engaging the World](#)

[Academic Plan 2006-2010](#) (External Version)

[Academic Plan 2006-2010](#) (Internal Version - Incorporating the Education Plan: 2006-2010)

[Senior Deputy Vice-Chancellor's Discussion Paper: Review of Coursework Programs, 12 May 2006.](#)

[Campus Directions Statements, November, 2006.](#)

[SDVC planning retreat January 2007](#)

Several now partly superseded planning documents have also been consulted, such as

Global Development Framework

Global Development 2002 - 2006

Leading the Way: Monash 2020

As background to the Review of Coursework models developed and proposed by other universities which have been examined include:

[Australian National University](#)

[The University of Melbourne](#)

[University of Western Australia](#)

[Victoria University](#)

The following HE government papers were consulted as background to the Review of Coursework.

The DEST papers entitled "[The Bologna Process and Australia: Next Steps](#)".
AVCC response to discussion paper "[The Bologna Process and Australia: Next Steps](#)".
UNESCO (1995). [Policy paper for change and development in higher education](#).

A full list of documents consulted is contained in the [bibliography](#).

3.2 EVIDENCE BASE

There have been ongoing discussions about methodologies and epistemological paradigms, i.e. what counts and should count as evidence.

In recent years, Higher Education world-wide has been subjected by policy-makers to a greater need and desire for improved accountability and effectiveness. While the need for evidence-informed policy is indisputable, the question what actually counts as acceptable and convincing evidence remains on the agenda. This is a complex issue, and even where there exists a wealth of data, the available information and research rarely provokes a single course of action. There is now much more focus on student achievements and outcomes, as well as on assessment and testing. Public manifestation of dissatisfaction with education systems, especially in relation to relevance, practical outcomes, cost-effectiveness, employability and career outcomes are common. There is growing interest among university management and policy makers in what education actually delivers. There is also the ever-evolving and rapidly changing IT and education-technology environment which gives vastly enhanced availability and accessibility to information, but which also raises new concerns about quality control and learning and teaching methodologies.

While effectiveness of education and pedagogy are in everybody's interest, associated discourses on efficiency and rationalisation are more difficult to accommodate. After all, notions of efficiency and productivity sit uncomfortably in a domain where one's main business is educating and looking after people. This notwithstanding, Monash University faces significant challenges in relation to properly resourcing high quality education. At Monash, as elsewhere, strategic planning naturally begins with high level visioning, values and a well-articulated mission. We therefore encourage the university to continue to look for external opportunities and explore internal strengths, to try and understand external contexts and select internal preferences. We hope that the Review of Coursework recommendations listed above reflect this approach. Looking forward, we hope that future support strategies around education at Monash will be based on principles of sustainable education rather than on-going growth and proliferation of units and courses.

Research may mean different things in different disciplines, and there is an emerging discourse in the social sciences and Higher Education in particular, addressing the nature of knowledge and evidence in the different disciplines. While academics accept different research paradigms and the ambiguous nature of knowledge, there is clearly a need for enhancing policy makers' awareness of the issue. Research instruments are important and the best (available) evidence should be used. Also, in a globalised

Higher Education context, an interdisciplinary research culture and reference to international research projects are crucial.

We prefer the terms evidence-informed policy (not just evidence based) and define this as “the conscious and explicit use of current best evidence in making decisions and choosing between policy options. The distinction is important, as burdens and standards of proof of causality are very different in different disciplines, and in many cases those responsible for evidence-informed policy are obliged to use the best available evidence at a given moment in time, whatever its strict epistemological status.”⁷

There is also the broader issue concerning the perceived legitimacy of policy making in general. At Monash, there are tensions within and between faculties as a result of competition for EFTSU and student fee income.

Epistemological paradigms, methodological issues and questions as to the status and acceptability of evidence are only part of the institutional policy context. The various players and their diverse interests, their interaction and attitudes towards policy implementation directly influence the success or failure of new policy recommendations. Also worth considering, and this will be important during the implementation phase of the RoC recommendations, is the quality of relationships between primary stakeholders (at Monash University these are predominantly researchers, educators, students, i.e. ‘policy practitioners’), and the degree to which relationships work, in terms of trust levels and information flows.

Admittedly, the function of this section on ‘evidence’ is primarily heuristic, that is, it is intended and designed to prompt reflection and analysis. The Review of Coursework has required a significant amount of institutional and educational research. The many colleagues who have contributed to this process of investigation are educationalists, social scientists, computer scientists, statisticians, demographers, historians, medical scientists from across the Monash network. While we are all comfortable with the diversity of information sources, many of us are less comfortable with the diversity of perspectives and backgrounds. In some quarters, there exists a state of mutually accepted antipathy, not just between management and academia, but also between quantitative and qualitative paradigms. Sometimes, this counterproductive antipathy is generally evidenced by mutual ignoring, rather than productive interaction.

There are obvious limits to the extent to which policy makers can influence systems. Policy makers are often seen as having too strong a focus on improving effectiveness, thus losing sight of other relevant considerations. This is particularly important in education, where notions of effectiveness and productivity are inherently contestable: “ideas for education reform that originate from policy makers will be as varied as the system itself. Whether or not those ideas are based on evidence and research will depend ...on the priority given to evidence-based policy...”⁸

⁷ OECD 2007 Knowledge Management. *Evidence in Higher Education. Linking Research and Policy*; p.16-17

⁸ OECD 2007 Knowledge Management. *Evidence in Higher Education. Linking Research and Policy*; p. 21

After all, ideas which are generally perceived as intuitively reasonable gain power and support through public opinion. Therefore, good ideas can and will serve as a basis for policy change and educational reform, regardless of whether there has been any empirical testing. The question then becomes how we progress from the quality of intuitive knowledge that aligns with established practices towards a more coordinated method for capitalising on ideas. The University of Melbourne is a recent example where a single and intuitively attractive idea has triggered massive structural change.

There exist basic philosophical issues concerning the nature of evidence and how different methodologies suit, and are used, to test different knowledge claims. Causation, for example is important, but problematic, especially because major decisions and the allocation of resources are frequently attached to projects purportedly addressing underlying causes. For example, funding is attached to performance levels in the area of student attrition and retention, yet the underlying causes guiding students' decisions are still poorly understood. ENTER scores and students' prior learning contexts (e.g. public vs. private schooling) are frequently cited in debates about student performance, yet there is still a poorly understood relationship between ENTER as an indicator of academic ability, a predictor of academic performance, or a reflection of prior learning environments. It is inherently difficult to identify the unique causal role of any one educational practice, or set of practices, unless these practices have first been isolated and then systematically varied.

In the context of institutional planning and policy development, the length of time required to obtain evidence, and the quality of data available, can be an issue for an institution-wide Review of Coursework. Proper sampling, and the avoidance of sampling bias, are important. In many instances, review and planning processes rely on input from internal departments (e.g. CHEQ or UPS) and external data sources for our analyses. Then there is the question of how different methodologies suit different knowledge claims. For example, some of the government's LTPF data suggests a particular level of performance in the area of further employment of our graduates, differentiated according to discipline clusters. Upon further examination of government LTPF data, it becomes clear, however, that low response rates in the absence of any notion regarding 'meaningful' or 'discipline-related' employment renders the data of limited use. The nursing skills shortage and some of the vocationally based undergraduate health professional courses are also instructive examples. While it would be easy to argue that the University should simply offer more places and update its curriculum, an effective solution depends on the availability of specified clinical placements. Thus the responsible faculty's ability to take on more health professionals is limited by their ability to obtain clinical places. Even though in this instance there are significant shortages to be addressed, it is not the responsibility of the university sector alone to resolve the problem. The situation is further complicated by the role of the VET sector, who have recently received significant funding to train nurses, and the fact that some professions have to pay for the students to undergo clinical training, and different rates apply to those disciplines.

3.3 RESEARCH QUESTIONS

The questions listed in this section have been provided as a guide and a starting point for the evidence-informed investigations that have taken place towards the key outcomes of the project. We wanted to develop a systematic, relevant and current evidence base for the recommendations in this report which meant that many of the questions were expanded upon and in many cases new questions added as the researchers delved into, reflected on and analysed the current literature and recorded best practice examples from Australian and international universities. In some instances, questions remain unanswered because of the lack of reliable institutional data.

The following discussion expands on this process and outlines the main themes and additional questions developed during the research stage of the project and generated new ideas which we have tried to articulate in section 4. (Coursework Principles) and section 5. (Delivery Architecture) below. Even in systems which have a strong reputation and are performing well, novel ideas are needed if they are to maintain their standing. The University of Melbourne's new model is a case in point, as indeed are the federal government's ongoing efforts to influence and shape Higher Education (e.g. *Diversity Agenda*; *Higher Education Endowment Fund*, *Rudd's 'Education Revolution'*). There is also an increasingly dominant employability discourse which adds external pressures on university to become more relevant. This is not a new debate. Jean-François Lyotard wrote more than 20 years ago:

“In the context of delegitimation, universities and the institutions of higher learning are called upon to create skills, and no longer ideals ... The transmission of knowledge is no longer designed to train an elite capable of guiding the nation towards emancipation, but to supply the system with players capable of acceptably fulfilling their roles at the pragmatic posts by its institutions.” (1987, p. 48)⁹

Discourses on ‘delegitimation of universities’ and ‘employability’ are still vague and unstable, since basic concepts such as skills and capabilities, transferability of knowledge or the difference between professional, technical, scientific or other specialist skills remain ill-defined. There is also what Teichler (2003)¹⁰ called the ‘mega trend’ of knowledge-based economies, knowledge societies, information societies etc., terms which are frequently used interchangeably and now seem essential for the future success of Higher Education. Few (like Graham 1999¹¹) challenge the ‘incoherence’ of the concept, and politicians and policy makers perpetuate the notion. There is also a conflation of future knowledge needs with technology and communication technologies, in particular. At Monash, efforts to create and update functional learning spaces and an education-technological framework are starting to emerge, and it is strongly recommended that educationalists and ITS collaborate.

⁹ Lyotard, Jean-François 1987 *The postmodern condition. A report on knowledge.* (G. Bennington & B. Massumi. Translation). Manchester: Manchester University Press. (French original published in 1979)

¹⁰ Teichler, Ulrich 2003 The future of higher education and the future of higher education research. *Tertiary Education and Management* 9(3) 171-185

¹¹ Graham, P. 1999 Critical Systems Theory. A political economy of language, thought, and technology. *Communication Research*, 26(4), 482-507.

Such ambiguities notwithstanding, there is nonetheless a need to identify what works, and the answer depends to some extent on the standards of available evidence.

Evidence-based policy depends on a reasonably clear *research-based* consensus. In Higher Education, this presents a challenge, because there is no homogeneous and mutually agreed knowledge base and, as a consequence, consensus is next to impossible at the institutional level where competing demands and expectations need to be balanced. Educational research is conspicuously weak in its ability to continuously develop and refine a body of knowledge, which is quasi-universally acknowledged as well-founded.

It is therefore accepted that there can be no single best method for or type of evidence-based policy research. Even questions that seem purely causal at first glance are embedded within contexts. It is also worth remembering that the main purpose of education research is to influence behaviour, shape attitudes, and to form and underpin policy. It is hardly ever used to develop new theories and paradigms, which is the preserve of the academic disciplines, pedagogues, educational psychologists and the natural sciences in particular.

The following list of research questions is somewhat arbitrary, but it reflects key issues and the framework established for the Review of Coursework in 2006. Therefore, we hope the questions we have been asking reflect a distinction between broadening and deepening capacity, where broadening is concerned with doing more of the same, but better, and deepening about enabling the system to engage in new initiatives. Section 4 below on 'Coursework Principles' reflects this dual approach.

During our consultations with the university community there was one clear message from all stakeholders, and especially Faculty Deans and Associate Deans (Education); that irrespective of developments across the higher education sector, and the need for curricular rejuvenation at Monash, the University has clearly discernible areas of strengths, and these should be supported and strengthened.

The following list is indicative of the questions that have shaped the review (See SDVC Retreat MindMap, RoC Report, Volume 2). The questions have been shaped according to 2007 key areas of the University's Education and Academic Plans, in particular the review of coursework and the contingent emphasis on employment outcomes, graduate attributes, research-led teaching, internationalisation of the curriculum, and generic, cross-discipline learning outcomes (e.g. ethics). Some of the questions have gained in status, such as the area of employability and employment outcomes. The acute skills shortage in many professions has implications for our more vocationally oriented courses. Similarly, the debate around institution level generic attributes which was finally resolved at Academic Board Meeting 4/2007, has given greater prominence to the themes of research-led teaching and internationalisation of the curriculum.

The research questions raised as part of the Review of Coursework are summarised on the following pages (p. 15 – 17). We simply posit the questions here and have clustered them thematically. The subsequent discussion section 3.4 raises some of the more substantive issues and findings pertaining to the key stakeholder areas of

education, pedagogy, students and funding model. As already mentioned, the full reports in volume 2 provide additional detail.

Cluster 1: Understanding our Education (courses and units)

Here we raised questions such as -

How many courses and units are offered across all faculties and campuses?

What is the relationship between disciplines and courses/units? (balance vs volume)

What is the relationship between faculties (silos)?

What is the relationship between campuses (multi-campus footprint/partitioning)?

What is our position vis-a-vis national and international competitors?

What factors in our coursework degrees are most important in encouraging entry into research degrees?

Cluster 2: Understanding our pedagogy: A thematic approach

Employability and Employment Outcomes (E&EO)

How does the literature define employability and employment outcomes?

How does the HE sector understand employability and employment outcomes?

What is current practice at Monash regarding employability and employment outcomes?

How does current practice align with issues such as skills development and skills shortage?

How do employers understand employability and employment outcomes?

Research-Led Teaching (RLT)

How does the literature define Research-Led Teaching?

How does the HE sector understand Research-Led Teaching?

How is Research-Led Teaching understood in each faculty/discipline?

How important or relevant is Research-Led Teaching within each faculty/discipline?

How is Research-Led Teaching practiced within each faculty/discipline?

Internationalisation of the Curriculum (IoC)

How does the literature define internationalisation of the curriculum?

How does the HE sector understand internationalisation of the curriculum?

What is current practice at Monash regarding internationalisation of the curriculum?

How can the Monash internationalisation of the curriculum framework be developed to be consistent with and to express the university's values?

Ethics: Generic Curriculum

How does the literature define this theme?

How does the HE sector understand this theme?

What is current practice at Monash regarding Ethics and Generic Curriculum?

Cluster 3: Understanding our Students

Questions raised under this categories addressed matters such as students' choices, performance and pathways.

Analysis of student choices

What are the recent trends in enrolment patterns at Monash?

- Local
- International
- Between disciplines/faculties
- Across campuses

To what extent have the characteristics of Monash undergraduates changed over the past ten years?

What informs the student choice?

How well do Monash courses meet the initial priorities of its undergraduate students?

How many Monash students change courses within Monash after successful completion of first year undergraduate study?

How many Monash students move to another institution after successful completion of first year undergraduate study?

How well does Monash provide for students who wish to change course?

Which courses are most likely to attract or lose students?

What are the educational and demographic profiles of students entering the various research degree courses at Monash and how do these compare with other Australian (Go8) universities?

Analysis of student performance

Performance by cohort

How well are Monash students performing by course?

Which courses have an unusual mark profile?

How well are Monash students performing by demographic cohort?

Which demographic cohorts are performing below average?

How well are Monash students performing compared with undergraduates from other Australian universities?

What characteristics of an undergraduate student are associated with academic performance?

How does the year of study affect academic performance?

How does the area of study affect academic performance?

Analysis of students' horizontal and vertical movements ("pathways")

What are the pathway patterns from U/G to P/G coursework and/or HDR?
(discipline/faculty/internal/external)

Are there different horizontal and vertical pathway patterns across cohorts?

How many students change faculty/discipline at u/grad level?

Analysis of relational data

What is the relationship between student satisfaction and performance?

What is the relationship between student performance/satisfaction and employability or further study?

What is the relationship between student performance/satisfaction and RLT practice?

What is the relationship between student performance/satisfaction and IoC practice?

Cluster 4: Understanding our funding models

We explored internal and external drivers:

Internal

How do our internal funding arrangements impact on the flexibility, responsiveness and efficiency of our course offerings (Faculty, Central, Strategic Initiatives)?

External

How do the external funding arrangements impact on the flexibility, responsiveness and efficiency of our course offerings (CSP, Fee paying – International and domestic, TPF)?

The *Review of Coursework: Volume 2, Research and Discussion Papers* contains the key sets of data, full reports and discussion papers the RoC has been able to draw on. Our advice to Faculties is to make use of the information for their own projects and purposes.

3.4 DISCUSSION

The questions listed above represent a guide and a starting point for the evidence-informed investigations that have taken place towards the key outcomes of the project. Our quest to develop a systematic, relevant and current evidence base for the recommendations in this report meant that many of the questions were expanded upon and in many cases new questions added as the researchers delved into, reflected on and analysed the current literature and recorded best practice examples from Australian and international universities.

Importantly, as we collated the analyses from various parts of the research project we began to see a convergence of themes from our findings. For example the

employability studies, student choice surveys, research-led teaching literature review and issues raised during the Review of Coursework all highlight converging themes around the skills demanded by employers, skills valued by students and best-practice approaches to research-led teaching and the principles developed to inform course review and development. This triangulation of results, across a broad range of data sources and analyses reassures us that our findings and policy recommendations are solidly evidence informed.

The following discussion expands on this process and outlines the main themes and additional questions developed during the research stage of the project.

Understanding our courses and units – general comments

The revised Monash Course Delivery Architecture (see Section 5) is predominantly about capturing existing strengths and opportunities rather than dramatically changing the delivery of coursework at Monash University. However, the model not only summarises established practice, it also emphasises new opportunities for more efficient pathways into HDR, and capitalises on the depth of the university's education portfolio by combining, and allowing for, a duality between vocational/professional and academic pursuits. This is referred to in the discussion paper on Coursework Principles in section 4 as horizontal and vertical pathways.

The vast majority of university leaders in charge of education, and teaching staff in particular, are not supportive of radical change. Recent responses to the Federal Government's Diversity Agenda by other Universities as reflected in the 'Melbourne Model', Swinburne's 'Associate Degree Model' or Victoria University's "New School of Thought" model which is heavily tilted toward vocational, industry and community engagement, are considered inappropriate for Monash.

Instead, Monash wishes to focus on existing strengths – choice, opportunities, double degrees – and build its reputation on that basis. In some instances, this also attracts high-performing students - double degree courses, whether in vocational or non-vocational areas have a higher proportion of first preference applicants enrolled.

The unstructured evolution of Monash Coursework Delivery is recognised, and staff accept the need to streamline current operations. Little opposition has been expressed to trimming back the thousands of units and hundreds of courses to a more manageable level. However, the preferred approach is 'considered change' rather than 'disruptive change'. Strategic justification and enrolment thresholds are widely supported (see esp. R24).

Deep and more traditional approaches to academic canon and intellectual engagement have a strong tradition at Monash, and there is a strong message to uphold the tradition and not engage in reactive pandering to external pressures. We agree with Young (2007:1)¹² that innovation, as the main educational point of distinction, must remain the defining educational feature for universities, as opposed to other sectors such as TAFEs, which are more about industry and social policy.

¹² Young, I. (2007). *Building better pathways to higher education*. Melbourne: Swinburne University of Technology.

However, there is also a tension, perhaps even a contradiction, in what is proposed. While highlighting the academic, and innovation, the model also suggests that Associate Degrees should be promoted and encouraged, not on a large scale but on selected campuses and in a limited number of disciplines. The discussion paper on Associate Degrees in Volume 2. provides useful background information. While there may have been concerns raised in the past about the potential negative reputation of Associate Degree ('second choice degree'), the higher education climate has changed in recent times, especially in light of the May 2007 federal budget. Reputational concerns are not supported in the relevant literature, and evidence at Monash's outer campuses (especially Berwick and Gippsland) suggests that they may have a function to perform at Monash in that they may play a niche role. After all, Associate Degree adds choice, and 'choice' is the single most salient message Monash University has been promoting recently.

The model also gives greater salience to the recognition and strength of Monash double degrees, and provides a way of conceptualising inconsistent pathways. It is hoped that improved pathways, including a reconceptualised Honours stream, will serve to attract more HDR students.

Irrespective of a strong focus on research and HDR pathways, there is widespread acceptance that relevance of education against the backdrop of vocational imperatives, employability outcomes and meeting the skills shortage are part of our responsibility. In 2007, three quarters of our students are career and job driven, and only one quarter are what we have termed "knowledge driven". Not surprisingly, the majority of the latter group is enrolled in generalist degrees such as Arts or Science, while the majority of our career driven students can be found in the professional faculties.

Cluster 1: Understanding our Education (courses and units)

Although perhaps a somewhat controversial claim to make, it would be fair to state that Monash as an institution does not understand its education well enough. Record keeping, data processing and other UPS-related services have been found wanting. This is not to say that individual disciplines and faculties do not provide top-class education and cutting edge curricula. Rather, there is a central admin malaise which is in need of being addressed at the senior management level if information and systemic gaps are to be closed. For example, in spite of considerable efforts trying to determine number of units and courses (global and per faculties), enrolment patterns and numbers, or understanding very complex, inconsistent and confusing unit coding systems, we are resigned to the fact that there still remain significant information and knowledge gaps. A specially convened unit coding working party was unable to resolve the issue and garner support from faculties.

In addition to Monash offering a very large number of units and courses in a manner that is not always transparent to staff and students, it is also worth noting that there exists a considerable number of courses with very low or zero enrolments. If we look at active courses as % of total enrolments, we discover that there are 214 out of 1064 (20.1%) active "courses" which have had zero EFTSL over the last 3 years. 25 courses out 946 (2.64%) had 50.77% of total enrolment in 2007. Full details are at <http://www.monash.edu/teaching/epic/index.html#CourseworkUnits>
<http://www.monash.edu/teaching/epic/index.html#Courses>

Recommendation 24 has been made to the effect that faculties might consider creating minimum enrolment thresholds for units (and perhaps courses). In addition, there is a need to revisit campus specific offerings and the question of discipline themes and clusters. Peninsula is a good case in point, where recent efforts to create hubs for primary education and health/ambulance/well-being has produced considerable success. Gippsland and Medicine, and Parkville and Pharmacy are other good examples where specific initiatives can work and address local needs. The Berwick Campus continues to struggle with its purpose and identity, however, while MUM and MSA have strong emerging themes which bode well for growing success.

Cluster 2: Understanding our pedagogy: A thematic approach

The institution's ability to understand its own educational structures is constrained as a result of systemic inconsistencies and confusion as to respective responsibilities for IM in different portfolios and departments. This bears on the institution's ability to deliver high-quality pedagogy and, in particular, creates risk for educational-technology driven systems. In trying to develop a better understanding of learning and teaching at Monash, we used the university's Education Plan as a point of departure. Employability, research-led teaching, internationalisation of the curriculum and ethics were identified as key themes. For each of the themes we postulated a series of research questions which are listed above. The discussion papers underpinning the RoC recommendations on these themes are included in volume 2.

Research-Led Teaching (RLT)

The research questions listed above largely directed our work in this area however additional themes and questions were developed. In particular, it was clear from the evidence collected from the literature as well as best practice accounts of RLT in Australia, New Zealand, the UK, the USA and Canada that a one-size-fits-all approach was not appropriate and questions about RLT needed to be asked of key stakeholders, particularly at the faculty and discipline levels of the university. To this end we asked senior members of the university executive and senior faculty academic managers about their conceptions of RLT and sought information on how senior faculty academic managers valued and rewarded RLT and how they anticipated the operationalisation of RLT policy within their schools and departments. As further set of research questions about how staff link their teaching and research and how students' experience research and develop research skills during their study remain unasked and unanswered and as such there is scope for future research in this area, probably at the faculty and department levels.

The key findings from the RLT report are as follows:

- RLT (research-led teaching) is what distinguishes a university education;
- RLT grounds students in the culture and ethics of scholarship;
- RLT needs to be supported and resourced at all levels of the university because it provides mutual benefits for students, academics and the university as a whole. Learning is the outcome that both research and teaching share in common;
- RLT contributes to improved learning outcomes through greater attention to student-centred approaches to teaching;

- RLT contributes to students' ability to cope with a complex and knowledge rich work environment by developing their research and inquiry skills in a process of continuous learning;
- RLT approaches to teaching and learning assumes that research and inquiry skills are developed through processes of continuous learning from first year undergraduate level through to honours and postgraduate study;
- Negotiations over the definition and operationalisation of RLT should be guided by a set of university-wide principles but conducted at the level of the faculty, discipline and individual academic.

Internationalisation of the Curriculum (IoC)

The university conducted an extensive study of IoC in 2005 which resulted in the adoption of a university-wide definition of IoC, a set of guiding principles and policy framework to guide IoC at Monash. This largely rendered the questions outlined above obsolete. Instead, the questions that guided our research on internationalisation of the curriculum focused on emerging ideas and evidence relating to IoC and levels of policy implantation at Monash. Consistent with current writing on IoC, the Monash approach, while laudable and enshrined in policy, is poorly implemented across the university, with some evidence of systematic action towards IoC in some faculties.

The key findings of the IoC report are as follows:

- IoC acknowledges that the world of work and professional engagement faced by students is characterised by global connectedness and networks of multi-lingual, multi-cultural and multi-ethnic networks;
- IoC prepares students with the competence to navigate cultures and languages different from their own so that they become true global citizens;
- IoC enhances students' ability to cope with greater complexity in the application of knowledge across disciplines and in diverse contexts;
- IoC may be described and operationalised in a myriad of ways that enhance students' international experience, knowledge of diverse cultures and competences to solve problems in a variety of locations and cross-cultural contexts.

Ethics and the Generic Curriculum

It is now widely accepted that ethics has become increasingly relevant to a range of professions (e.g. in the fields of sustainability, environmental studies, engineering) which have become more interdisciplinary and therefore more complex. Working with faculties and more clearly defined disciplines will create the necessary dialectics across the university to deliver an enhanced undergraduate curriculum to its students. The added challenge, and advantage, for Monash lies in the university's strength as derived from its diversity and internationalism, and the need to address ethics in an international context subject to different cultural frameworks is self-evident.

The "Ethics and the Generic Curriculum" project unfolded in three stages and involved a working party comprised of colleagues from all faculties with a background in ethics in their specific disciplines and faculties. Stage 1 involved scoping and reviewing current practice at Monash University, and the mapping of existing teaching activities. An audit of 'teaching of ethics' at Monash was conducted

which resulted in the logging of nearly 600 units with ethics content of between 10%-100%. Stage 2 is currently in progress and involves the re-development of an existing undergraduate unit “Ethics at Work” which will be available to students from all faculties, in particular students who would not normally be able to select one of the existing ethics units. “Ethics at Work” is a cross-discipline curriculum project which creates unit content including both generic aspects of ethics, and embedded, discipline specific modules. Stage 3 will deal with implementation and involve the cross-indexing of multi-discipline content, drafting of selection rules and determination of content thresholds. The Ethics Working Party has recommended that, in keeping with the Education Plan objective, and the nexus between ethics, employability and internationalisation, Monash graduates should have been exposed to a minimum of no less than one 6 credit point unit, or its equivalent, of ethics content.

It is worth noting that recently concluded surveys of employers, staff and students all highlight the importance of ethics, both in the workplace, and as an integral part of a quality tertiary education. We argue that there is a need to re-think the balance between the teaching of academic and generic skills, and how the modern curriculum should be structured. Employers, staff and students recognise the importance of generic skills, such as communication, teamwork, interpersonal skills, analytical and problem solving skills and highlight the importance of ethical principles. Employers in particular accept the relevance of ethics – 80% consider ethics very important.

Cluster 3: Understanding our Students

Characteristics of Monash Undergraduate Students (2002 to 2006)

In order to consider an efficient and successful approach to the implementation of the University’s Education Plan, and the Review of Coursework in particular, we wanted the process to be informed by reliable information about the background and the characteristics of our students, and on the extent of change in these characteristics over recent years. Understanding our students naturally has implications for the nature of courses, the delivery of coursework and the curriculum and the learning environment. Monash’s ‘elite’ status has ramifications for the age structure, suburb of origin and school type for Monash commencers. As entry to Monash has become more competitive, this has favoured school leavers with high ENTERs. Such school leavers are concentrated in the more affluent middle and inner suburbs of eastern and southern Melbourne. As a consequence Monash students are increasingly drawn from those living in these suburbs who have attended Independent schools. This is particularly the case for commencers at Clayton and to a lesser degree, the Caulfield campus.

Monash students are heterogeneous in terms of composition and distribution.

- in 2006, there were more than 6600 units listed in the handbook (the 2007 figure is expected to be closer to 7000 (at the time of writing the report in late 2007, the 2007 data had not been made available yet)
- in 2006. there were 4737 units with enrolments¹³
- in 2006, there were 6765 unit offerings with enrolments¹⁴

¹³ This is a count of unique unit codes for all units which had enrolments in 2006

- in 2006, ca. 22% of Monash students were international (fee-paying, offshore; 16% UG and 6% GPG)
- Commencing students are getting younger: The share of 18 and 19 year old commencers has increased from 42.8 per cent in 2002 to 48.4 per cent in 2006. There was a corresponding decline in the proportion of older students. For example the proportion of 30-39 year old commencers decreased from 7.5 per cent in 2002 to 5.5 per cent in 2006. However, age of enrollees at Clayton and Caulfield campuses has not followed the overall pattern of first entrants to Australian universities, which shows a tendency towards commencement at age 20 or 21.
- Domestic Monash undergraduates are being drawn increasingly from the Independent school sector. The proportion of commencing students from Independent schools has increased from 29.8 per cent in 2002 to 32.9 per cent in 2006. When the share of the Catholic sector is added (20.0 per cent in 2006) the two private sectors greatly exceed the share of enrolments from the Government sector, which declined from 39.9 per cent to 37.9 per cent over the 2002 to 2006 period.
- Monash University's status as an elite institution is becoming more pronounced. Most Monash commencing students achieved ENTERs in the higher brackets and this proportion is growing. In 2002 67.1 per cent of all undergraduate commencers had an ENTER of 80 and above. By 2006 this proportion had increased to 72.5 per cent.
- Over the same period, the proportion of commencing students in the top five percent of ENTERs increased from 15.7 per cent to 20 per cent.
- With almost one quarter of international students, from an educational point of view, the pattern of enrolments by course on the part of overseas students is of interest. For example, in cases where courses have high proportions of overseas students, there may be implications for the way the course is taught and examined given that some overseas students do not possess the same level of English skills as their domestic counterparts. This has been the subject of some debate in recent years and is a significant issue, since our analysis of the language spoken at home of overseas undergraduate students enrolled across Monash campuses indicates that 87.1 per cent speak a language other than English at home. Among those who do not speak English at home, more than half speak a Chinese language.
- By far the highest concentration of overseas students occurs in the Business and Economics Faculty, where the proportion has grown from 31.1 per cent to 39.3 per cent between 2002 and 2006. Within this faculty, there are several courses where the majority of commencing students are overseas full fee-payers. They include the Bachelor of Business (Accounting) where in 2006 there were 174 international student commencements and 91 domestic student commencements, Bachelor of Business (Banking and Finance) where there were 104 international and 48 domestic students and Bachelor of Commerce (Accounting and Finance) where there were 259 international students and 32 domestic students. It is a well-known fact that the popularity of such courses is partly due to a curriculum needed for professional accreditation by the

¹⁴ A unit offering is defined here as a unit taught on a particular campus in a particular year, with a particular census date and unit class. Further, where units have multi-level or cross-listed codings they have been grouped under what is termed a 'unit reference code' since these are taught as a 'single teaching event'

professional bodies representing accountants in Australia and that this accreditation is required by those wishing to apply for a Permanent Residence visa in Australia. Recent changes to immigration guidelines may have an impact.

- By contrast, the proportion of overseas students in the Information Technology Faculty has contracted from 42.7 per cent to 33 per cent, although there is evidence that in 2007 this trend has started to reverse.
- Monash's role as a major site for overseas students is well known. However since 2002 the overall proportion of commencing undergraduates who were full fee-paying overseas students has stabilised at about 22 per cent. All campuses with the exception of Gippsland and Peninsula have a high representation of overseas students. However, Monash has fallen behind in the growth rate for international students relative to total enrolments at Australian universities.
- The campus is a significant variable in terms of the characteristics of our students. The point about diverse student cohorts has been made previously, and it is worth noting that limited homogeneity has consequences for how we offer education. Embedded in this debate is also a quality argument and the effectiveness of the so-called matrix-management approach at Monash aimed at regulating relationships between Faculties and Campuses. For example, while everybody agrees that quality of education is paramount, there are different sides to the argument that identical content is the way to achieve this. Some faculties accept this as an inevitable consequence of delivering Education at Monash. There should be no variation between particular course offered in different locations which, in principle, should offer identical content, delivery and assessment procedures. Other faculties, while accepting the quality argument, are more prepared to accept the inevitable ambiguities that come with a large, complex, multi-campus and multi-cohort approach to higher education and allow some minor variation in content between campuses, and encourage the development of special, embedded, modules aimed at enhancing education by addressing local specifics such as history, culture, religion, ideology etc.. In addition, where learner cohort display significant differences between campuses, one needs to consider variant learning styles in order to maximise good education.
- Gippsland now has a substantial and growing proportion of mature aged student commencers whose have different learning needs. Berwick, Peninsula and Gippsland campuses draw predominantly from the suburbs in close vicinity of the respective campuses, which are significantly different socio-demographically. The trend, and the differences, are becoming more pronounced, too. For example, in the case of Clayton and Caulfield campuses, just over half of the commencing students whose home is in Melbourne come from the more affluent suburbs in Boroondara, Eastern Middle Melbourne and Southern Melbourne, and the share of students drawn from Independent schools has tended to increase.
- In relation to ENTER band, Monash is attracting domestic students from the elite end of university applicants. The median ENTER for all Victorian VTAC applicants in 2006 was approximately 66. However, there is distinct differentiation according to campus:
 - Berwick: most b/w 70-80
 - Gippsland: most under 70

- Peninsula: Most b/w 70-90 (bifurcated because of distinct disciplines with very different bands)
- Clayton: most > 85
- Caulfield: most b/w 80-90
- Parkville: very high (but due to a single discipline ENTER).

As far as student dispersal across Monash Campuses is concerned, cohort diversity and lack of learner homogeneity is striking, with marked differences between Clayton, Caulfield on the one hand, and Berwick and Gippsland on the other. Coupled with a large number of majority NESB international students, the educational challenge for Monash is considerable. The question then becomes, whether homogenisation of education (as, for example, the Melbourne Model or the expected new model from UWA) suggest) is desirable, remains to be seen. The reality at Monash is that heterogeneity and diversity among our students is matched by a coursework system that is marked by choice and opportunity. Recent trends suggest that Monash University's status is growing, along with the University of Melbourne, at the top of the prestige hierarchy of the universities in Melbourne.

These outcomes mean that Monash Clayton, in particular, is drawing from applicants who have a wide choice of courses and universities available to them. Since they are in a position to choose, if Monash wishes to target the very best, there is some pressure on the university to provide courses which appeal to these students. In our previous study (Topic One Report on Preferences) it was established that the best of these students tend to seek entry to prestigious vocationally oriented courses in the medical field and in law. It was also found that because the number of applicants far exceed the number of available places, many of those who missed out, and subsequently enrolled in arts and science were doing so as their second, third or later choice course. One implication is that Monash may have to extend the range of relatively prestigious vocational course offerings at the Clayton and Caulfield campuses if it is not to lose some of the high performing applicants to such courses offered at less prestigious universities.

The situation at the other Monash campuses (except Parkville) is different. The students enrolling in these campuses are predominantly in the middle ranks of ENTER levels who are not in a position to compete for the more prestigious end of the course market. Students in these campuses tend to be attracted to vocational courses, but in less prestigious fields such as education, commerce and nursing. In a sense, because these campuses do not have the attraction of elite status, they have to be particularly attentive to providing vocational courses that appeal to the prospective students living in their catchment. Peninsula has been successful in this regard with the recent introduction of courses in the health field such as physiotherapy and occupational therapy.

Analysis of student choices

The undergraduate student body at Monash University is characterised by an increasing majority of females (54.5% in 2002 to 56.1% in 2006). The proportion of undergraduates drawn from the 18-19 year old cohort is increasing with a corresponding decline in the older age brackets. Since 2002 the overall proportion of commencing undergraduates who were full fee-paying overseas students has stabilised at about 22 per cent.

Competition for entry to Monash has increased. In 2002 67.1 per cent of all undergraduate commencers had an ENTER of 80 and above, by 2006 this had increased to 72.5 per cent. This coupled with the University's explicit strategy of increasing the proportion of its students who achieve ENTER scores in the top 5% of the state has had an impact on the composition of the student body (15.7 per cent in 2002 to 20 per cent in 2006). There is an increase in those drawn from the Independent school sector (29.8% in 2002 to 32.9% in 2006) and an increased concentration of commencing students are drawn from the more affluent middle and inner suburbs of eastern and southern Melbourne. This is particularly the case for commencers at Clayton and to a lesser degree, the Caulfield campus.

The average age of enrollees at these two Monash campuses is decreasing and has not followed the overall pattern of first entrants to Australian universities, which shows a tendency towards commencement at age 20 or 21. This appears to be because it allows prospective students the opportunity to earn the necessary income to become classified as 'independent' and therefore eligible for the Higher Education Youth Allowance. We believe that the social stratum from which Monash Clayton in particular is drawing from is sufficiently affluent and keen on their children gaining a university education that parents are able to provide for the financial needs of their offspring without the help of the Youth Allowance. This situation also helps to explain why there has been a contraction in the older entrants and those taken from an alternative pathway to the VCE. Such applicants have been unable to compete with the high performing school leavers seeking entry, especially to Monash Clayton.

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An analysis of the relationship between the supply of places in Monash courses and the demand for these courses among those who seek a university place was conducted using VTAC course preference data for the period 2002 – 2006. The focus of this analysis was narrowed to concentrate on the applicant pool for Commonwealth supported places.

Analysis of the first preference data for Victorian universities shows that:

Monash along with RMIT and the University of Melbourne dominates the first preference list attracting respectively in 2006 10,160, 9,949 and 10,740 representing collectively some 56% of the total 54,863 first preference applications.

Melbourne and, to a lesser extent, Monash are the favoured destinations both of which have a higher proportion of their first preferences drawn from the highest performing applicants (ENTER >80). For Melbourne in 2006 this group represents 74 per cent of their first preference applicants and 46 per cent for Monash.

The competitiveness of Melbourne and Monash meant that in 2006, only 32.4 per cent of first preference applicants to Monash received an offer and just 24.5 per cent for Melbourne. With the exception of Australian Catholic University (32.7%), the proportion of offers to first preference applicants was much higher at other Victorian universities than for Melbourne and Monash.

In 2006, Monash has the lowest proportion of first preference enrolees and deferees (46.8 per cent) of any metropolitan university.

A more detailed analysis of the first preference data for Monash showed that:

In 2006 the Clayton, Caulfield and Peninsula campuses attracted a very large share of the first preference CSP applications to Monash, collectively accounting for 85 per cent of the total.

The Clayton campus attracts the bulk of all first preference applicants from the High ENTER (>80) category with two thirds of all first preference applicants for Clayton courses being drawn from this category.

The first preference data indicates that Monash Clayton enrolees show a strong preference for courses where there is a clear articulation into a professional vocation with 85% of students enrolled in the Law faculty enrolled in their course of first choice, 82% of those studying Medicine/Surgery, 75% of those enrolled in Information Technology and 69% of those studying Education. The non-vocational courses have a lower proportion of first preference enrolees with almost 50% of those enrolled in Arts not indicating an Arts course (either at Melbourne or Monash) as their course of first choice. The vast majority of these enrolees had indicated a preference for Law or a Law double degree. Similarly of those enrolled in Science some 50% had indicated a first preference for another more vocationally oriented course such as: Biomedical Science, Medicine, Pharmacy, Nutrition, Psychology, Engineering and Veterinary Science.

Overall, for the Clayton campus over the period 2002 – 2006 the proportion of students achieving their course of first choice has grown from 50% to 58%. This

growth is partly due to the increase in enrolments in the high demand law and medicine courses.

Approximately half of the enrolees in the Pharmacy course were first preference enrolees with the majority of those who were not putting a Melbourne University course such as Medicine or Dentistry as their first choice.

The percentage of students enrolled at Caulfield studying in their course of first choice is just over 46%. The variation across faculties was; however, marked with some 80% of students enrolled in Art and Design being first preference applicants compared with just 22% of those enrolled in Arts at Caulfield. Even after taking into account for the Arts cohort those who had indicated Arts at Melbourne or at Clayton as their first preference, this still left well over half who had indicated a different course altogether as their first preference.

A relatively high proportion (64% in 2006) of Peninsula enrolees are first preference applicants reflecting the predominance of vocationally oriented courses. It is also hypothesised that regional campuses attract a proportion of first preference applicants based on a preference for their local campus due to unwillingness or inability to travel or relocate to attend a metropolitan campus. This might be a factor influencing first preferences at the Berwick and Gippsland campuses, where 55% and 60% of enrolees are enrolled in their course of first preference. There is indeed a high incidence of students enrolled in courses which were not their first preference and that this pattern is evident across all the Monash campuses.

The proportion of enrolees who were not first preference applicants was around 50 per cent across the university in 2006. The highest proportion in this category was at the Parkville and Clayton campuses. However, when the figures for these two campuses were adjusted to take into account first preference applications for like courses elsewhere – mainly at the University of Melbourne – this reduced the level to roughly that of the other campuses. There was a further significant minority of Monash enrolees, of almost 20 per cent, who were not studying in either their first, second or third choice of course.

It proved to be difficult from the data available to determine why such a high proportion of students were unable to obtain their first preference course. However, one factor is clear, particularly for the Clayton campus. This is that there are many more students seeking entry to the more prestigious vocational courses, notably Law and Medicine, than there are places available.

The analysis showed that there was a high proportion of enrolees in the non-vocational courses at Clayton, notably Arts and Science, who had missed out on their first preference in Law, Medicine or related double degrees.

In courses like Medicine and Law there is a disjunction between preferences and course selection where students were unable to gain entry to prestigious courses. Instead, students had to settle for places in the more non-vocational fields of arts and science. Students are more likely to be enthusiastic about engaging with and achieving a high performance in courses that they have aspired to participate in relative to other courses. Also, many students only take on a university course if they

feel that the costs and effort involved in completing it provide an entrée into a rewarding career, and they seek to enter courses where there is a clear link to a professional vocation

The extent to which Monash students are enrolled in courses which reflect their study aspirations, as indicated by their stated preferences when they applied for a university course, provides an understanding of course choice and academic performance. Most Monash Clayton enrollees prefer to choose a course where there is a clear articulation into a professional vocation. This is evidenced by the fact that there are substantial numbers of students in the relatively non-vocational courses who are not studying in the courses they put as their top priority:

- 58.2 per cent of all Arts Faculty enrollees were in their course of first preference (adjusted), implying that just over 40 per cent were not
- the outcome is similar for the Business and Economics faculty, where just over half were not studying in their first preference choice
- Science Faculty, where almost 50 per cent were in the same category
- great majority of students in the Law Faculty, 84.8 per cent enrolled in their first choice
- 82.2 per cent of those studying Medicine/Surgery
- 75.6 per cent of those in the Info Tech Faculty
- 69.6 per cent in the Education Faculty
- in Engineering only 53.8 per cent were enrolled in 2006 in their first preference course¹⁵

There is also a significant minority of students enrolled in the non-vocational faculties whose course was not their first or second preference. This applies to almost one third of those enrolled in the Faculty of Arts and one third in both the Business and Economics, and Science faculties. In addition, 20 to 25 per cent of enrollees in the non-vocational faculties were not enrolled in a course which they specified as either their first, second or third preference when they applied for a university place. A far smaller proportion of those enrolled in the more vocational courses fell into this category.

Preferences are the main driver for course selection for student. Institutional reputation appears to be a key ingredient. There is a significant Melbourne/Monash preference link which can be summarised as follows:

- data implies that for the majority of those Victorian applicants who gain an offer (55 per cent), it is for course that they have listed as their first preference
- 45 per cent of all offers were made to second preferences or below. This could be significant if it means that students set on a particular course, say Law or Accounting, are not able to achieve their study aspiration
- Only 14.6 per cent or 10,870 offers were for courses outside the top three preferences in 2006
- majority of full fee domestic at Monash are in Pharmacy, Law, and Medicine, all highly prestigious and much sought after professional courses

¹⁵ further analysis (not shown in the table) indicated that about half of the engineering students who did not enrol in their first preference at Monash had applied for another Monash Engineering course, usually in one of the double degree courses

- Monash, along with RMIT and the University of Melbourne dominates the first preference list

From an education portfolio perspective, teaching resources at Monash have increased only marginally in recent years, compared to other areas of growth. In 2006, Monash employed 1575 teaching and research staff (as opposed to non-teaching, 'research-only' staff). In this regard, it is interesting to note that the University claims that staff-teaching ratios (SSR) has improved from 20.98 to 19.22 in 2005 and 19.04 in 2006.). There is an assumption that this reflects positively on teaching quality because the improved ratio suggests smaller cohorts and an improved learning environment. However, measured against the relatively small increase in teaching staff it is clear that this is not the case: teaching staff numbers increased by a very small fraction only from 1512 in 2004 to 1553 in 2005 and 1575 in 2006. Put differently: the 9.2% improvement in the SSR is matched by a much smaller rise of teaching staff of only 4.1%. The improvement in the ratio is primarily due to the marked increase in research-only staff, which rose from 890 in 2004 to 1165 in 2006, a 31% increase. For an institution aspiring to become more research intensive this is a positive development, and there is a message in these figures for research-led teaching.

In spite of changing student demand and expectations, the university is constrained in its ability to respond:

- Commonwealth Government control over the allocation of places within universities has allowed universities little flexibility to respond to student course preferences
- in some of the sub-regional student markets within Melbourne, including the south eastern growth area, the growth in university applicants has been far greater than the number of CSP places within reach of these prospective students
- the number of year 12 applicants for university places has increased but the number of Commonwealth Supported Places (CSP) has not kept pace

Analysis of student performance

The objective of this project was to examine the effect, as well as predictive potential, of demographic and academic characteristics on academic achievement of undergraduate students at Monash University (Australia). Statistical models were developed relating average marks achieved by Monash University students to demographics and previous educational experience and performance. The models take into account the courses that students were undertaking.

For first year students the key findings are:

- Academic performance is related to the ENTER score for all faculties.
- Part time students perform worse than full time students. This does not apply in the Faculties of Law; Medicine, Nursing and Health Sciences; and Pharmacy.
- Older students perform better than younger students. No real differences were observed between older and younger students in the Faculties of Engineering and Pharmacy.

- Similarly, except for the Faculties of Engineering and Pharmacy, where no differences were observed, female students performed better than male students.
- In a majority of faculties, students who had completed a degree, or partially completed a degree, performed better than students who had not.
- Students who spoke English at home had better results than other students, except for the Faculties of Education and Law, where there were no differences.
- Previous school type had an effect on performance. However, this effect was inconsistent across faculties.
- The effect of Disability Status, Socio-economic Status, International Student Status and ATSI Status was isolated to particular faculties.

For later year students the key findings are:

- Previous years academic performance at Monash has more influence on current academic performance than the ENTER score.
- Engineering part time students perform worse than full time students at almost all stages.
- In contrast to the first stage, older students perform about the same as younger students in stages 2, 3 and 4, except for stage 4 students in the Faculties of Education and Engineering.
- Female students performed better than male students at all stages in the Faculties of Education; as well as Medicine, Nursing and Health Sciences.
- In contrast to the first stage, students who previously had completed, or partially completed, a degree perform no better than those who had not at stages 2, 3 and 4.
- The effect of language at stage 4 was only present for the Faculties of Art and Design; Business and Economics; Engineering; as well as Pharmacy.
- Other effects were isolated to particular faculties.

Analysis of students' pathways

Between 2000 and 2006 a total of 5269 students commenced HDR. Significantly, more than half of these students (3723) did not enter through Monash coursework completions. Also, the majority of students progressed from a relatively small number of Monash courses, notably the Bachelor of Science (Hons), Bachelor of Arts (Hons), Biomed Science (Hons). It is also worth noting that only a very small number of students - 29 - pathway through Masters Coursework programs. A further breakdown of student movement data will be provided in January 2008, pending a further report from CEET.

Analysis of relational data

While the research literature provides convincing evidence that student satisfaction and an institution's commitment to RLT, IoC and performance correlate positively, there remain data gaps at Monash in this regard. There is some anecdotal evidence to suggest that the improvement in recent years in MEQ and CEQ in particular may be related to the university's stronger commitment to IoC and RLT.

Cluster 4: Understanding our funding models

We have been unable to resolve the fundamental question of efficiency of course delivery at Monash University, although we accept the presence of systemic inefficiencies reflected in the existence of nearly 7000 undergraduate and postgraduate units and 900 courses¹⁶. However, attempts at calculating the exact resource implications of duplication of units and content, overlapping curricula and multiple teaching events and repetition in faculties and on campuses have not yielded the expected clarity. Existing costing models lack explanatory value in this regard and intelligent data capable of shedding light on the cost of course delivery at Monash is inadequate. Considerable effort has been invested in developing a more reliable understanding of the funding models currently in place at Monash, both Faculties and Campuses. While income streams and the balance between local/international and CSP/fee paying revenue are reasonably clear, there exists a rather limited grasp on the relationship between number and size of course and unit offerings, and questions of efficiency and resource implications as a consequence of the large number of units and courses on offer. There is a profligate number of low and zero enrolments, and many instances of duplication where units and courses are offered in different locals. Feedback has been sought from FiRM and Faculties, but no clear pattern has emerged. Although an earlier attempt failed to make the nexus between flexibility, responsiveness and efficiency of our course offerings the focus of a CASR application, it seems advisable to explore further the relationship between course and unit offerings, resource implications and efficiency. Feedback received so far has been that ABC activity in the larger faculties could be worth further investigation. However, ABC costing as a top down activity yields useful broad indicators of cost but not to the level of units or courses. Work has therefore commenced involving a model of the revenues generated by each unit which may allow to link the units which have different numbers by checking with the exam system records, that is, if a common exam paper then he can count as a single unit. This has the potential to show the revenue in each unit and the revenue per student. The exercise will not reveal the cost of running a unit but it will at least trigger a response if the revenue is quite low. Ultimately, however, and in the absence of central intervention, Faculties (and in some case disciplines) now have budget autonomy and responsibility, and any decisions concerning the efficiency of coursework delivery and potential enrolment thresholds rests with them.

4 COURSEWORK PRINCIPLES

As outlined in Section 2 above the Review of Coursework draws on several of the key objectives of the University's strategic plans. The vision and fundamental philosophy for the delivery of education at Monash University, as expressed through these documents, draws together the institution's aspirations, especially where they relate to internationalism, research-led education, and world-leading research. In addition to such high-level strategic goals, it is instructive to revisit the principles underlying the review of coursework.

¹⁶ Figures reported to DEST for 2007

The principles of choice, breadth and depth, transferability, cross-boundary mobility and the creation of an optimal learning environment inform the way in which the university develops its (in particular: undergraduate) courses, while ensuring that the very best educational experience is available to students, and that it is available in an innovative, flexible and student-centred learning environment.

4.1 PRINCIPLES

The principles, listed below, are derived keeping in mind respect for the distinctiveness of education at Monash, and the need to extract the strengths of existing educational practices across our campuses and faculties. The principles are thus in keeping with feedback from Faculty Deans (Deans' Forum, November 2006 and the Committee of Deans; December 2006). They also reflect the tenor of the Academic Plan and the vision and a set of fundamental beliefs of the university as articulated in *Monash Directions 2025*.

4.1.1 Choice

A key principle of Monash's course and unit delivery architecture is the choice that students are offered. At Monash, students have the opportunity to choose the direction in which they wish to take their studies. This recognises the enormous diversity within the student body and the wide-ranging motivations and driving forces that inform students' desire to learn. Clearly, this principle is part of the 'diversity' agenda'. However, where diversity refers to 'availability', choice is about 'opportunity'. The 'elite model' at GPG level, balanced by a common market model at the undergraduate level positions the institution well in terms of empowering students to become 'knowledge literate' and professionally competent. It bridges the gap between the vocational and employability demands on the one hand, and the traditional academic engagement of universities on the other. Government rhetoric and sectorial discourses on knowledge economies/-societies/-workers/-transfer etc. compel us to embrace the notion of 'knowledge literacy'. The concept is much underdeveloped in the academic literature and remains fuzzy, but it can no longer be ignored. Also, the nature of knowledge in a globalised world is becoming increasingly ambiguous; it is incumbent on the university to incorporate changing frames of reference in its approach to education.

4.1.2 Breadth & Depth

The choice offered to undergraduate students is informed by the importance of providing a depth of learning, from a breadth of options. All students should be required to master at least one discipline and can decide to master more than one through double majors or a double degree structure. All students will complete their degrees with a mature understanding of their discipline area, and also undertake studies outside this to broaden their understanding and knowledge. High achieving students have the opportunity to select to a course that goes beyond a standard degree. This principle therefore draws on our main strength, i.e. the large pool of expertise across a broad range of disciplines and faculties. The majority of students embrace this principle already, and they are frequently our best and brightest students anyway. The ability of Monash to allow students to experience education through exposure to

diverse disciplines and through its double degree structure is a key strength. In addition, professional degrees with a compulsory four-year track give students a deeper learning experience than some of our main competitors.

4.1.3 Transferability

Transferability essentially refers to transferability of choice: across our network of campuses and faculties, transferability is already a key feature of some of our courses. For example, in the BA and the BA Global students can move freely across campuses in the disciplines of communications and international studies, where there exists an integrated curriculum with clearly articulated transition points between year levels. Although reflective of local practice and experience (e.g. communication and media studies in MUM; or international studies in MSA) students are able to transfer acquired knowledge across disciplines, faculties and campuses. Transferability also refers to the ready adaptation of knowledge acquired in other discipline domains and cultures, albeit within limits. This is a particular strength of our new graduate attributes and generic skills projects (such as ethics). Students acquiring the fundamentals of a research-led approach to knowledge production or the internationalisation of knowledge transfer (production and application) should be readily capable to move between disciplines in a given field.

Students have the opportunity to transfer between courses and within courses; whether between two courses within the same faculty; from a single to double degree; from one faculty to another; or from one campus to another. This transferability also allows students to change the direction of their studies, their decisions informed by first hand experience. Subject to availability of places, pre-requisite studies and achievement levels, this principle ensures that all able students, who may not have initially gained entry to their preferred course, are able to follow their vocation of choice.

An important corollary of transferability is more efficient pedagogic integration across faculties and campuses. While we maintain that local 'flavour' needs to be respected, we see limited justification for allowing faculties to exercise a significant degree of constraint over curriculum content. Curricula need to be delivered and developed by, and shared among, colleagues, having due regard to available and emerging technologies and new pedagogic insights.

4.1.4 Cross-Boundary Mobility

This is where the common market model comes into strength. While individual disciplines ought to be encouraged to retain their individual texture and identity, students should be enabled and encouraged to move more freely and experience the nature of knowledge through the prism of different disciplines, epistemologies and cultures (especially in relation to our multi-campus network). It is recognised that some constraints must remain and unacceptable dilution resisted, especially where professional accreditation requirements create external points of reference and create impediments to mobility.

Monash will foster collaborative development of curriculum across faculties and disciplines and, where appropriate, the integration of course material across campuses.

Local engagement and relevance will be preserved, but the duplication of workloads must be minimised in order to ensure resources are available to continue to enhance the quality of the student experience. The development of interdisciplinary skills will be a priority. Students should be encouraged to move across disciplines and experience knowledge through a range of epistemologies. This principle will extend to the design and delivery of courses, enabling students to experience a range of disciplines in order to make informed choices about their future.

4.1.5 Creation of an Optimal Learning Environment

This principle is closely related to the principles of transferability and choice. Its overarching purpose is one of increasing access through the application of blended learning. It signifies the role of education technology or ICT in the context of high quality delivery of education across our networks. Much work has recently been undertaken on multi-campus delivery and it is felt that embedding a principle of enhanced or optimal 'Learning environment' in the RoC has distinct advantages for further development and implementation. Underpinning the notion of 'creation of an optimal learning environment', an Educational Technology Framework and implementation roadmap is being developed in 2007 which will provide impetus and direction for the appropriate use of ICTs in the Monash context, in terms of policy, process and governance and implementation of Educational Technology. The aim is to ensure that technology advances high quality learning and teaching at Monash as a research-led, multi-campus, international university. Clearly, the added flexibility adds to choice in the context of increasing access through blended learning. Here it signifies the role of education technology or ICT in the context of high quality delivery of education across our networks. Much work has already been done on multi-campus delivery and it is felt that embedding the principle in the RoC has distinct advantages for further development and implementation.

4.2 GRADUATE/POSTGRADUATE CONSIDERATIONS

While the principles outlined in this section relate to undergraduate courses they should be applied to Monash's graduate/postgraduate (GPG) offerings in terms of what to study and how to study. At the graduate level, following an undergraduate degree, graduates' current choices include: (re)training in a new area, following an undergraduate degree in a different discipline area, through modular graduate certificates, diplomas and masters degrees; extending their discipline studies from their undergraduate degree, through (modular) postgraduate certificates, diplomas and masters degrees or engage in research training, through higher degrees by research (MPhil and PhD). In addition to this modes of study include modular graduate and postgraduate certificates, diplomas and masters degrees as well as on and off-campus learning.

In summary there should be a limited suite of high quality graduate/postgraduate courses only where courses are aligned to research strengths and priorities with an increase in pathways to PhD and Professional Doctorates.

Cross boundary transferability for GPG courses might also be considered, especially in an ever-evolving context of interdisciplinarity and employability expectations.

4.3 IMPLICATIONS OF PROPOSED COURSE ARCHITECTURE

The following serves as a brief reference guide to existing policy and potential operational implication.

4.3.1 Choice

Current policy with regard to student choice in their undergraduate degree is limited to the following options; they can choose a broad generalist three-year degree; engage in vocational training by undertaking a professional degree or a double degree, combining a professional degree with a generalist degree or another professional degree or complete a diploma (or additional major) concurrently with their degree in several of the major disciplines - two in (many) single degrees, and up to three in (some) double degrees or through a concurrent diploma. Finally they can complete an an honours year following a three-year degree, leading directly into a PhD. Within some faculties Monash undergraduates currently have some choice as to whether they will; alter their path over the course of their studies; undertake studies in other faculties to complement their learning experience and/or study on one or more campuses within Australia or internationally.

Given existing, somewhat limited course choices, the operational implications of greater choice as outlined in the new coursework architecture means that apart from course requirements for a major, minor or professional accreditation, other units should be 'free electives' subject only to necessary pre-requisites and prohibitions (and achievement levels).

4.3.2 Breadth & Depth

Currently at Monash, all degree courses have a minimum of 144 credit points. This includes a minimum of 24 credit points of electives. Majors are a minimum of 48 credit points of cumulative discipline knowledge, requiring a minimum of 12 credit points at 3rd year level based on prerequisites.

- The operational implications of increased breadth and depth of courses as outlined in the new coursework architecture are that all degrees will continue to require a major sequence and a minimum of one major (48 points) and one minor (24 points). Consistent with the principle of choice above, pre-requisites should only be specified where sequential knowledge is required. The minimum number of electives required in courses should be increased to encourage broad coverage and depth of knowledge beyond main discipline areas.

4.3.3 Transferability

The main operational implications of the transferability principle is that unnecessary boundaries that restrict entry and exit to courses should be removed, for example, unit pre-requisites and prohibitions should be clearly justified in pedagogic terms. Every faculty should offer at least one elite undergraduate course, such as the Bachelor of

Science Advanced, the BA (Global), the Bachelor of Accounting and high demand courses should reserve some commencing load for internal transfers, (for example, 40% of the Law intake could be reserved for internal transfers).

4.3.4 Cross Boundary Mobility

The operational implications of the cross-boundary mobility principle relate to the removal of unnecessary duplication of curriculum development and teaching materials for units taught on more than one campus or faculty. This must of course be tempered by the recognition of the need to develop curricula and materials to suit the local context in which the course is taught. In addition the 'cross-boundary' experience should be embedded in courses to require all students to cross international and/or local boundaries for part of their course. This flexibility should be available in all courses. Where pedagogically desirable, cross-boundary mobility should also be offered at unit level. Course and unit-level curriculum should be developed collaboratively across campuses.

4.3.5 Creation of an Optimal Learning Environment

(n.b.: this section will be completed in conjunction with the group in charge of the Educational Technology Framework)

4.4 CONCLUDING COMMENTS

The five principles, while originally developed in a somewhat arbitrary fashion, have been subject to debate, discussion and revision over the last six months. They now stand as a set of well developed and generally accepted guiding principles to shape the development of undergraduate courses at Monash into the future. An alternative, and more reductionist, approach would be to propose two guiding principles, clustered as Choice, depth and breadth and cross-boundary mobility and optimal learning environment and transferability. The first cluster has the student at its centre, their experience in relation to content and substance. The second cluster is one of institutional and (infra-) structural networks and possibilities: course rules, prohibitions, constraints, mobility schemes etc. enabling students to derive full benefit from what is offered and captured under principle one.

We would argue that the five principles lend themselves more readily to operationalisation and implementation at faculty level, whereas clusters 1 and 2 would be useful in a more abstract debate. Further conceptual work will be undertaken on this during the implementation phase of the Review of Coursework.

The two dominant values which have formed the base for the Review of Coursework framework have been those of a 'common market' and 'subsidiarity'¹⁷. The common market model, referred to earlier, relies on choice, transferability and mobility, and is complemented by structures where decisions are taken as closely as possible to the stakeholders, i.e. students and faculties. This principle of subsidiarity includes in

¹⁷ The 'subsidiarity' principle is well understood in constitutional law, and social and political science. There are many very similar definitions, most along the lines of the following: "a principle in social organization: functions which subordinate or local organizations perform effectively belong more properly to them than to a dominant central organization." <http://www.m-w.com/cgi-bin/dictionary?sourceid=Mozilla-search&va=subsidiarity>

scope two opposing ideas, i.e. the ‘necessity’ test of subsidiarity and its ‘effectiveness’ test. The purpose of the ‘subsidiarity principle’ is to ensure that decisions are taken as close as possible to the people they affect and that action is taken at the level where it is most effective.

Finally, in our discussions with deans and faculties we are keen to subtly shift the dialogue from efficiency and rationalisation to the notion of successful and sustainable education: the different terminology allows us to move from an encumbered discourse on efficiency and rationalisation (encumbered because academics associate the terms with neo-conservative/liberal economic principles and are hesitant to embrace the terms) to one of good organisation, competence and success, which we believe are concepts more readily embraced by staff.

The course architecture proposed in this section, guided by the principles of choice, breadth and depth, flexibility, cross-boundary transferability and the creation of an optimal learning environment are consistent with EPIC’s other key areas of research; graduate attributes, research-led teaching, internationalisation of the curriculum, employability and ethics. These strategic initiatives complement the review of coursework findings and the principles developed to build a framework that guides the Monash approach to education and learning that is student-centred, research-led, international, ethical and relevant to the future employment of Monash graduates.

5 A REVISED COURSE DELIVERY ARCHITECTURE

The background and context relating to the RoC were discussed earlier in Section 2 of this report. As part of EPIC's goals to review coursework in line with Monash's strategic goals, an early attempt to radically change the Monash course delivery architecture and qualifications framework, to a four-year default degree with a built-in second-year Associate Degree exit point, was considered an inappropriate response by the Committee of Deans in late 2006. It is now accepted that although the majority of Monash students have a four-year minimum undergraduate experience (double-degrees, honours, professional degrees which must comply with industry accreditation requirements), choice and equity are underlying key values. Therefore, requesting a significant number of students to remain enrolled for an additional fourth year was found to have undesirable consequences for the development of coursework. Consequently, a balance between equity, choice, quality and excellence must be struck in the way Monash configures its coursework programs. It is felt that this is best reflected in an approach which allows more choice, flexibility and movement across courses and faculties at undergraduate level, matched with a smaller number of high-quality and relevant Masters programs, both in professional and non-professional faculties and disciplines. Such an approach would echo the themes of equity and excellence, engagement and diversity, underpinned by a broadly based and high quality undergraduate education and complemented by a more intensive and discipline specific delivery model at the graduate and postgraduate level.

This 'common market model' of undergraduate education aligns well with our generic and institution level Graduate Attributes of internationalised, communication-competent and research-led, the latter of which will also facilitate better recognition among our graduates of the value and principles of research which, in turn will be positively reflected in HDR pathways. Our revised delivery architecture will be relevant, more coherent and cohesive, and responsive to the needs of our students. The common market model will create more flexibility for students to choose freely at undergraduate level. Prohibitions and constraints, course and unit rules will be solely based on pedagogic grounds. This will be accompanied by a significant reduction in the thousands of UG and hundreds of GPG units across faculties. Many courses will remain unchanged, and their designation and description may be 'labelled' to address the market rather than a transparent pedagogy. Pedagogy will be defined more broadly and in the Monash context, invoking our strategic goals and reflecting the institution's graduate attributes. On the other hand, an elite model at Graduate/Postgraduate level will position us well vis-à-vis our main competitors, and retaining a small number of elite undergraduate courses will ensure that we attract our share of the top five percent of students. We must not allow the principle of dispersal to create diffusion and undermine the importance of our high quality UG courses. It is further proposed that the university will impose a threshold on the minimum number of enrolments required for a unit to run, and commit faculties to a more collaborative framework where faculties and disciplines share their expertise. For example, a pilot involving six faculties is currently being developed under the auspices of EPIC for the development of a framework for teaching ethics across a wide range of disciplines.

The diagrammatic representation of the Monash Course Delivery Architecture (see Section 5, volume 1) is predominantly about capturing existing strengths and

opportunities than dramatically changing the delivery of coursework at Monash University. However, the model not only summarises established practice, it also emphasises new opportunities for more efficient pathways into HDR, and capitalises on the depth of the university's education portfolio by combining, and allowing for, a duality between vocational/professional and academic pursuits. This is referred to in the discussion paper on Coursework Principles in section 4 (Vol. 1) as horizontal and vertical pathways.

The vast majority of university leaders in charge of education, and teaching staff in particular, are not supportive of radical change. Recent responses to the Federal Government's Diversity Agenda by other Universities as reflected in the 'Melbourne Model', Swinburne's 'Associate Degree Model' or VU's "New School of Thought" model which is heavily tilted toward vocational, industry and community engagement, are considered inappropriate for Monash.

Instead, Monash wishes to focus on existing strengths – choice, opportunities, double degrees – and build its reputation on that basis. In some instances, this also attracts high-performing students - double degree courses, whether in vocational or non-vocational areas have a higher proportion of first preference applicants enrolled.

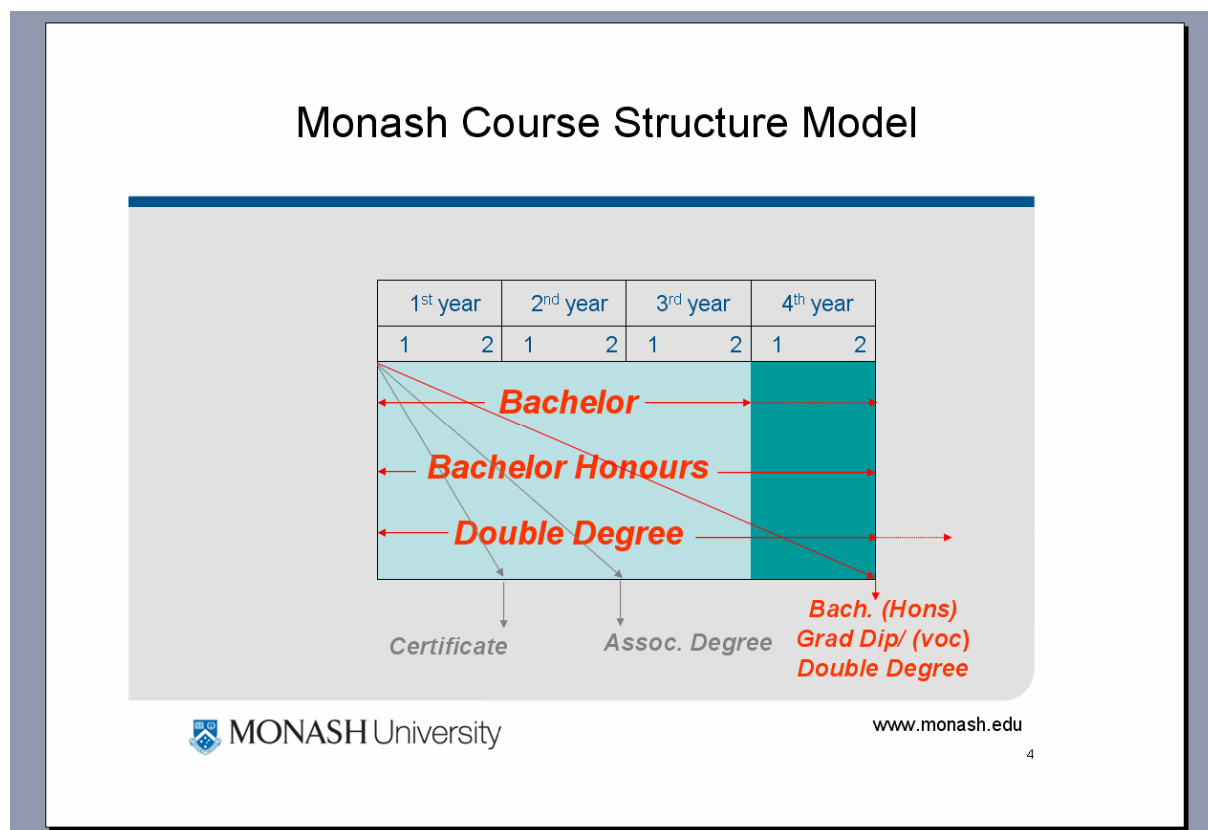
The unstructured evolution of Monash Coursework Delivery is recognised, and staff accept the need to streamline current operations. Little opposition has been expressed to trimming back the thousands of units and hundreds of courses to a more manageable level. However, the preferred approach is 'considered change' rather than 'disruptive change'. Strategic justification and enrolment thresholds are widely supported (see esp. Recommendation 22).

Deep and more traditional approaches to academic canon and intellectual engagement have a strong tradition at Monash, and there is a strong message to uphold the tradition and not engage in reactive pandering to external pressures. We agree with Young (2007:1) that innovation, as the main educational point of distinction, must remain the defining educational feature for universities, as opposed to other sectors such as TAFEs, which are more about industry and social policy.

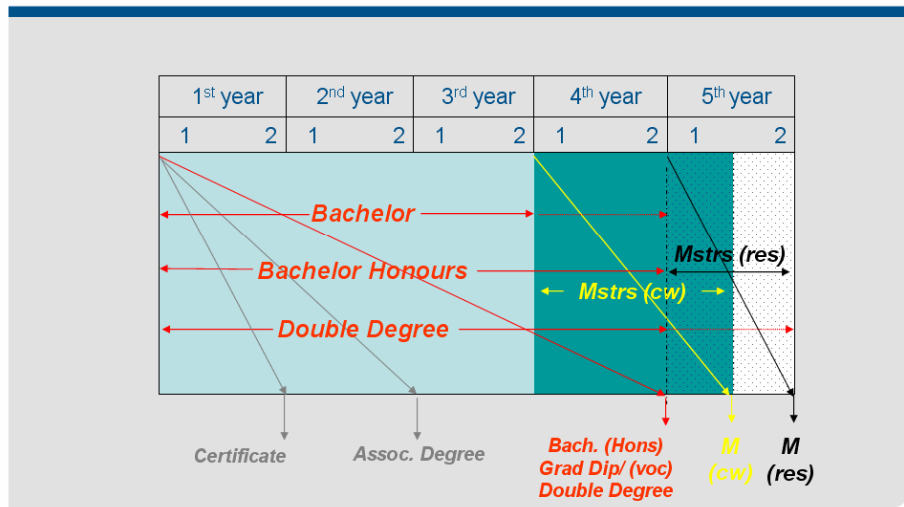
However, there is also a tension, perhaps even a contradiction, in what is proposed. While highlighting the academic, and innovation, the model also suggests that Associate Degrees should be promoted and encouraged, not on a large scale but on selected campuses and in a limited number of disciplines. The discussion paper on Associate Degrees in Vol 2. (Section 1) provides useful background information. While there may have been concerns raised in the past about the potential negative reputation of Associate Degree ('second choice degree'), the higher education climate has changed in recent times, especially in light of the May 2007 federal budget. Reputational concerns are not supported in the relevant literature, and evidence at Monash's outer Campuses (especially Berwick and Gippsland) suggests that they may have a function to perform at Monash in that they may play a niche role. After all, Associate Degree adds choice, and 'choice' is the single most salient message Monash University has been promoting recently.

The model also gives greater salience to the recognition and strength of Monash double degrees, and provides a way of conceptualising inconsistent pathways. It is hoped that improved pathways will serve to attract more HDR students.

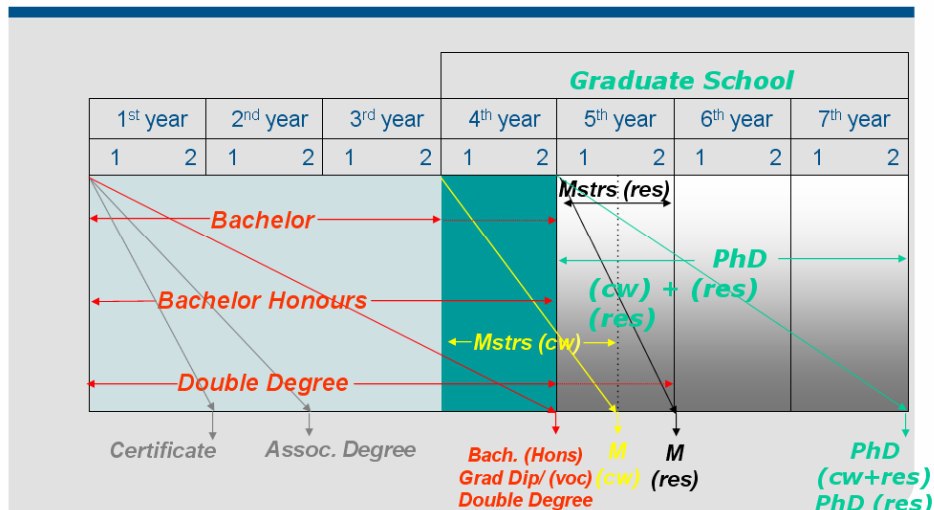
Irrespective of a strong focus on research and HDR pathways, there is widespread acceptance that relevance of education against the backdrop of vocational imperatives, employability outcomes and meeting the skills shortage are part of our responsibility. In 2007, three quarters of our students of our students are career and job driven, and only one quarter are what we have termed "knowledge driven". Not surprisingly, the majority of the latter group is enrolled in generalist degrees such as Arts or Science, while the majority of our career driven students can be found in the professional faculties.



Monash Course Structure Model



Monash Course Structure Model



6 CURRICULUM

6.1 EMPLOYABILITY AND EMPLOYMENT OUTCOMES

Volume 2 of the Review of Coursework documentation contains detailed and comprehensive discussion papers on skills shortage and the relevance of employability in Higher Education. The research and literature review in particular highlight the considerable theoretical and ideological challenge ahead, and how universities will respond to the growing calls for more relevance, improved employment outcomes and meeting the skills shortage. The debate is reflected in the dozen or so recommendations under the rubric of ‘employability and employment outcomes’, and in particular through R7 which states that Monash courses should reflect a balance between student and employer expectations and academic integrity and canon. Further work has been undertaken by way of surveying employers (national and international; N=1340), staff (N=288) and students (N=6400) about their needs and expectations in regard to the importance and relevance of the link between education and desirable employability outcomes.

A full report and analyses have been included in Volume 2. Individual faculty reports will be completed by the end of September 2007. It was considered methodologically important to separate the data according to vocational/professional faculties on the one hand, and the more generic/academically oriented faculties like Arts or Science on the other. Finally, the importance of the nexus between employability and Higher Education also transpires in other publications, such as the analyses undertaken by CPUR on behalf of EPIC on the characteristics of Monash University students (full report see Volume 2) which concludes that “...Monash may have to extend the range of relatively prestigious vocational course offerings at the Clayton and Caulfield campuses if it is not to lose some of the high performing applicants to such courses offered at less prestigious universities.” (p. 14). This view is also supported by a recent study conducted by CEET on behalf of the Victorian State Government¹⁸. The report addresses future employability and skills demands and projects needs over the next fifteen years until 2022. While there is clearly a case for both the university and the VET sector to address the issue, it is interesting to note that the authors highlight the importance of ‘skills deepening’. In this context they make the significant observation that “Employment will grow more quickly in higher skilled occupations than in lower skilled occupations” and project that “More workers will have higher level qualifications. The numbers with higher education qualifications will increase by 52.5 per cent.”(p.4).

There is a pervasive public discourse on skills shortage, and the relevance of education in relation to employment outcomes. A future workforce will underpin a knowledge society and economy characterised by innovation and high skill levels. Policy debates and public rhetoric are clearly skewed towards an instrumentalist education system. Both, the former federal government’s announcement¹⁹ to make

¹⁸ The report by Shah, Cooper and Burke (August 2007) was prepared for the Office of Training and Tertiary Education, Department of Innovation, Industry and Regional Development. EPIC has been provided with an internal & confidential copy. The full report will be made available once released by the responsible government agency.

¹⁹ see e.g. <http://www.abc.net.au/worldtoday/content/2007/s2032964.htm> 14 Sep 2007

available \$170 Mio worth of funding to address the nursing shortage, marking a return to a more VET oriented training scheme, was quickly matched the opposition's plan for a "Skills Australia" agency²⁰ are cases in point. While the former is particularly anti-intellectual, praxis oriented and looks at the establishment of 25 private nursing schools and returning the education of nursing to the hospital floor, the latter emphasised the need to bring policy makers, industry experts and academics together.

For Monash University, the institutional response to industry demand for higher education graduates is one of balance. Without diluting the intellectual rigour of academic pursuits, it is incumbent on the university to respond to societal and community needs. There is solid support from different stakeholder groups. There is very strong evidence in our survey results and data analysis to suggest that students and employers would welcome a stronger focus in our coursework of professional content and outcomes. Section 3.4 (Vol. 1) will provide a more detailed interpretation of the findings.

For example, a projection of industry demand for higher education graduates until 2022 concerning the qualifications profile of people in employment in Victoria, estimates that

- more higher education level training will be required for new entrants and for existing workers
- the number of additional people who will need to acquire qualifications from 2008 to 2022 is estimated to be 1.5 million, with equal numbers of new entrants and existing workers. Of these, 46 per cent will need a higher education qualification (34 per cent bachelor degree, 10 per cent at postgraduate degree and 2 per cent at graduate certificate/diploma) and 54 per cent a VET qualification
- the major reason for the increasing proportion of workers with qualifications is skills deepening.

The qualifications profile of the employed workforce in 2022 predicts that

- employment in Victoria will to increase by 0.9 per cent per year, increasing from 2.49 million in 2006 to 2.88 million in 2022
- employment will grow more quickly in higher skilled occupations than in lower skilled occupations
- trends of skills deepening within occupations continue over the next 15 years
- over 77.6 per cent of Victoria's employed workforce in 2022 will have some post-school qualification (36.2 per cent at higher education levels and 41.4 per cent at the VET levels)
- the employment of workers with qualifications will increase by 747,000, of those without qualifications it will decline by 441,000

Hence additional people will need to gain qualifications over the next 15 years to raise the proportion of Victorians in employment with qualifications to 77.6 per cent. It is further forecast that in the 15 years to 2022

²⁰ see e.g <http://abc.net.au/news/stories/2007/09/15/2033786.htm?section=australia> 15 Sep 2007

- over 1.5 million Victorians will need to acquire qualifications. Of these, about half will be new entrants to an occupation and the rest will be existing workers
- qualifications will be acquired at higher education and VET levels. About 45.7 per cent of qualifications will need to be at the higher education level and 54.3 per cent at the VET level. This translates to 689,000 net completions of higher education qualifications
- just over half the qualifications of new entrants will need to be at the higher education level. About 54.2 per cent of qualifications of new entrants will need to be at the higher education level. Of these 88.5 per cent will need to be at the bachelor level
- More than half of all new entrants with qualifications will be to high-skill occupations. About 58.5 per cent of all new entrants with qualifications will be to the three high-skill occupation groups (managers and administrators, professionals and associate professionals) with another 30 per cent to all levels of clerical, sales and service occupations
- Most qualifications that existing workers acquire will need be at the VET level. In all, 62.8 per cent of qualifications that existing workers acquire will need to be at a VET level and 37.2 per cent at a higher education level (just under half at postgraduate and graduate certificate/diploma levels and the rest at bachelor level).

Volume 2 of the Review of Coursework documentation contains two detailed and comprehensive discussion papers on the skills shortage and the relevance of employability in higher education. The research and literature review in particular highlight the considerable theoretical and ideological challenge ahead, and how universities will respond to the growing calls for more relevance, improved employment outcomes and meeting the skills shortage. Further work has been undertaken and a large scale survey of employers, staff and students been conducted (national and international; N=1340), staff (N=288) and students (N=6400) about their needs and expectations in regard to the importance and relevance of the link between education and desirable employability outcomes. A full report and analysis have been included in Volume 2.

The importance of the nexus between employability and higher education also transpires in other research, such as the analysis undertaken by CPUR on behalf of EPIC on the characteristics of Monash University students (full report see Volume 2) which concludes that "...Monash may have to extend the range of relatively prestigious vocational course offerings at the Clayton and Caulfield campuses if it is not to lose some of the high performing applicants to such courses offered at less prestigious universities." (p. 14). This view is also supported by a recent study conducted by CEET on behalf of the Victorian State Government²¹. The report addresses future employability and skills demands and projects needs over the next fifteen years until 2022. While there is clearly a case for both the university and the VET sector to address the issue, it is interesting to note that the authors highlight the

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importance of ‘skills deepening’. In this context they make the significant observation that “Employment will grow more quickly in higher skilled occupations than in lower skilled occupations” and project that “More workers will have higher level qualifications. The numbers with higher education qualifications will increase by 52.5 per cent.”(p.4).

Our staff survey confirms that staff are increasingly accepting of the need to teach beyond the traditionally “academic”: 85% agree that there is a need to provide a balance between the practical and theoretical, and 76% agree that internships and practical learning experiences are either important or very important.

Whether Monash needs to introduce new disciplines in order to address employability and the skills shortage, is a complex question. There are existing gaps, and new disciplines like dentistry or veterinary science may be considered. Research show a growing demand, and enrolment in these disciplines have increased in recent years and are expected to continue to grow. The Monash Campus network may provide an advantage in terms of locating new disciplines at its urban fringe where there is strong demographic growth, or on rural campuses.

6.2 RESEARCH-LED TEACHING

The *Towards Research-led Teaching at Monash University: Current Research and Implementation Strategies* report can be found at Review of Coursework: Volume 2. The report provides a review of the current research and practice relating to research-led teaching (RLT) in Australia, the United Kingdom and to a lesser extent, the USA and Canada. The report argues that the implementation of research-led teaching provides for high quality teaching and learning outcomes that are student-centred and research based. RLT demands that teaching and learning approaches are grounded in the scholarship of teaching and value research-based knowledge, research activities and an approach to curriculum development that is consistent with the values and activities of scholarship. Importantly, the implementation of RLT will prepare Monash graduates for employment in a knowledge-intensive and globalised world by providing them with research capabilities. The report recommends the adoption of a university-wide definition of RLT and offers a series of policy recommendations designed to achieve these outcomes and facilitate the implementation of RLT across the faculties.

6.3 INTERNATIONALISATION AND INTERNATIONALISM

The *Internationalisation of the Curriculum: A Review of the Literature and Discussion Paper* can be found at Review of Coursework: Volume 2. The IoC report provides a review of the current research and practice relating to internationalisation of the curriculum (IoC) in Australia, the United Kingdom, the USA and Canada. The report updates our current knowledge about IoC and emphasises the global-national-local dimensions of internationalisation and the imperative of providing Monash graduates with an education that incorporates both international and intercultural perspectives. For Monash, student employability is enhanced by an educational experience that develops the “international” graduate equipped with a range of global competencies and a cultural literacy including reflection on one’s personal

perspectives that permits engagement with globalised and internationalised work environments in their home country and internationally. The report endorses Monash's current IoC policy approved by Academic Board in March 2005 because it remains consistent with current research and practice. Further, the report argues for the necessity for the development of indicators to measure the progress of internationalisation at Monash.

Monash's Internationalisation strategy (sometimes referred to as 'internationalism') is sometimes met with a degree of scepticism and cynicism by staff and students. It has been argued that while Monash is very vocal in its international endeavours, there is a mismatch between rhetoric and reality. Our recommendations regarding IoC and the Graduate Attributes should serve to address this issue. They are consistent with major trends in the international higher education landscape where the importance of linguistic diversity and intercultural competence is no longer challenged. This is now also increasingly recognised in Australia, most recently in the Go8 reports "Languages in Crisis. A rescue plan for Australia".²²

6.4 ETHICS AND THE GENERIC CURRICULUM

The project "Ethics and the Generic Curriculum" was funded as a 2007 Education Related Strategic Initiative. The project was not originally part of the Education Plan Implementation project and the Review of Coursework. However, since one of the key objectives of the Monash University Education Plan 2006-2010 is to "*To help our graduates become ethical, engaged and employable, capable of addressing the challenges of the future in a global context*", the initiative was taken up by EPIC.

It is now widely accepted that ethics has become increasingly relevant to a range of professions (e.g. in the fields of sustainability, environmental studies, engineering) which have become more interdisciplinary and therefore more complex. Working with faculties and more clearly defined disciplines will create the necessary dialectics across the university to deliver an enhanced UG curriculum to its students.

With the exception of specifically discipline-based efforts which appear to operate in isolation at Faculty or Department level (e.g. Medicine, Law, BusEco), focussing predominantly on professional ethics and targeting more advanced UG and PG (e.g. Bioethics) students, there remain unresolved issues concerning the effectiveness of delivering a more broadly based ethics curriculum to Monash undergraduate students. A preliminary scan of existing practice elsewhere reveals that there exists a myriad of approaches to, and definitions of, ethics. These range from elementary first-year undergraduate courses with a narrow discipline focus to more general critical theory and philosophical definitions ('*ethics as a set of moral principles and values*', '*ethics as the science of human duty*'). It is clear that the desideratum expressed in the Monash Education Plan aims to address the latter, more general attribute of ethical standards and behaviours.

The added challenge, and advantage, for Monash lies in the university's strength as derived from its diversity and internationalism, and the need to address ethics in a international context subject to different cultural frameworks is self-evident.

²²<http://www.go8.edu.au/policy/papers/2007/Go8%20Languages%20in%20Crisis%20Discussion%20Paper.pdf>

The “Ethics and the Generic Curriculum” project has unfolded in three stages and involved a working party comprised of colleagues from all ten Faculties with a background in ethics in their specific disciplines and faculties. Stage 1 involved scoping and reviewing current practice at Monash University, and the mapping of existing teaching activities. An audit of ‘teaching of ethics’ at Monash was conducted which resulted in the logging of nearly 600 units with ethics content of between 10%-100%. Stage 2 is currently in progress and involves the re-development of an existing undergraduate unit “Ethics at Work” which will be available to students from all faculties, in particular students who would not normally be able to select one of the existing ethics units. “Ethics at Work” is a cross-discipline curriculum project which creates unit content including both generic aspects of ethics, and embedded, discipline specific modules. Stage 3 will deal with implementation and involve the cross-indexing of multi-discipline content, drafting of selection rules and determination of content thresholds. The Ethics Working Party has recommended that, in keeping with the Education Plan objective, and the nexus between ethics, employability and internationalisation, Monash graduates should have been exposed to a minimum of ethics content no less than one 6 credit point unit.

This may mean a single unit such as “Ethics at Work” with 100% ethics content, or several units with partial ethics content. It is worth noting that recently concluded surveys of employers, staff and students all highlight the importance of ethics, both in the workplace, and as an integral part of a quality tertiary education.

We argue that there is a need to re-think the balance between the teaching of academic and generic skills, and how the modern curriculum should be structured. Employers, staff and students recognise the importance of generic skills, such as communication, teamwork, interpersonal skills, analytical and problem solving skills and highlight the importance of ethical principles. Employers in particular accept the relevance of ethics – 80% consider ethics very important.

6.5 COMMUNITY ENGAGEMENT

The link between community engagement and education has not been a key focus of the 2007 Education Plan Implementation strategy, nor of the Review of Coursework. However, community engagement is becoming a recurring theme in the broader context of education, in particular where there is a link between employability and education, and internationalisation. Community engagement is also a theme that is referred to in the University’s Academic Plan on several occasions under the rubrics of Education, Internationalisation and Research.

It is generally recognised that, as is the case with other areas of curricular innovation such as research-led teaching (RLT) or the internationalisation of the curriculum (IoC), that successful community engagement needs to apply to all levels of the organisation. It is instructive to note that, unlike some other institutions (including Go8s), Monash does not have an overarching community engagement framework, in spite of the fact that community engagement is given prominence in the University’s statements of mission of purpose. While we recognise the importance of the link between Higher Education and the community, at Monash a clear articulation and

definition of underlying principles remains sketchy. Indicators of community engagement need to be aligned with university's governance structure. Considering the size and complexity of Monash University, it could be argued that in addition to mission, vision and purpose statements, there needs to be a commitment at a number of levels, such as

- Academic and administrative leadership
- Faculty, Disciplinary, Department and interdisciplinary networks
- Research, Teaching and Learning
- Faculty roles, development and reward
- Structures and resources, incl. internal and external budget allocations
- Community groups, activities promoting public dialogue
- Student engagement.

These indicator clusters connect to and involve different areas of the organisation - senior administration/management, resources, advancement, marketing, students. Most importantly, however, as with IoC and RLT, successful CE takes place in the disciplines and is made effective by staff who are engaged, connected and understand their and their discipline's relationship(s) with colleagues, students and the community better than anybody else.

The brief of EPIC is to ensure that the University's Education Plan is put into practice. The role of the Review of Coursework is not to present a detailed analysis of CE across the entire organisation. Rather, and for the purposes of the course review, we need to focus on Teaching and Learning and, inevitably, student engagement. We therefore propose that during the implementation stage of the review recommendations, faculties engage in more detailed curriculum reviews which concentrate on indicators pertinent to Teaching and Learning in a broader sense, and on faculties and disciplines where their activities are inseparable from Teaching and Learning (and for that matter, in some instances, research). For example, whether the University's senior leadership demonstrates an authentic desire to review, discuss, and strengthen its commitment to civic engagement and community building is a matter for subsequent discussions in another forum, but not necessarily the direct responsibility of the Education Plan. As far as Teaching and Learning is concerned, we can identify the following criteria:

Does the course

- offer curricula which overtly address the value and relevance of community engagement through the prism of the discipline;
- promote the availability of community-based learning opportunities present across the majority of the curriculum;
- provide students with multiple opportunities to become involved in community-based work in a more generic sense;
- create formal opportunities for students for sharing their community engagement experiences (e.g. in credit units, forums, group meetings);
- deliver curriculum content which specifically deals with community-based problems or issues;

- provide access to a curriculum which contains multiple cultural and historical perspectives on the meanings of community-based work;
- promote community knowledge and community expertise valued as essential to the education of students;
- have a focus on experiential learning which is recognised as an academically credible method of creating meaning and understanding;
- formally introduce students to the concepts and skills necessary for civic engagement and community-based work early on in their academic careers;
- guarantee access to internships, work-placements or other types of practical experience;
- offer course-based community initiatives which are structured and/or coordinated across disciplines;
- utilise especially recruited and trained student leaders to work with community partners?

Clearly, as far as CE is concerned, there exists variation between faculties and disciplines. Some areas with a more professional orientation and external accreditation standards (engineering, accounting, nursing) have had a strong community and industry placement focus for some time. In other, more traditional areas, the phenomenon of CE in the sense of work experience is relatively new. Also, the definition of 'community'/'communities' and relevance and potential can be domain and discipline specific. Monash language departments, for example, have a long and successful tradition of engagement with ethnic communities, but opportunities for active involvement remain under-explored. Business and Economics are well represented in the business sector, and Science is well-known through its work with teacher networks.²³

²³ N.b.: the indicators outlined in section 6.5 were approved by Education Committee in August 2008.

7 RECOMMENDATIONS

7.1 GENERAL COMMENTS

The recommendations contained in volume 1 have been clustered in a manner that reflects the different strands of our investigations, and the principles that govern education at Monash. None of the recommendations suggest a radical departure from current practice. Instead, we have heeded advice and attempted to strike a balance between good practice and a more creative and innovative way forward. There undeniably exists a competitive environment in Higher Education and it is incumbent on Monash University to continually evolve and improve.

The recommendations pertaining to an integrated course delivery model (section 7.1.1) are pitched at the strategic and policy level. We hope that they will focus the mind and prompt educators from faculties and disciplines into dialogue and collaboration. The recommendations also accept the challenge of the increasingly cacophonous employability agenda and suggest variety, choice and opportunity as key strengths. Transition and exit pathways are seen as key ingredients for students, offering them an education characterised by choice and continuity

Curriculum/Pedagogy

At the more practical level, we are submitting a set of recommendations which address curriculum matters, issues of pedagogy and content. New agendas created by external drivers have been added to the mix, and some serious reflection on the part of educators will be required. Some visionary thinking will be needed to put some of the suggestions into practice. For example, recommendations 16 and 17 capture the need for more 'practical learning', and the stretch target, at least in principle, to offer every Monash student a practical learning experience was motivated in discussion with faculties. The idea has strong support elsewhere, both in the research literature, government reports and, most importantly, the survey feedback from students, staff and employers. Recommendation 11 is another example of potential curricular rejuvenation: our audit has revealed that at Monash we teach some 600 units across all faculties which deliver either partially or entirely, ethics content. The ethics working party felt that a minimum threshold of classroom exposure to ethics teaching was advisable in order to meet only the relevant Academic Plan objective, but also pay attention to the findings of our surveys: the vast majority of students and employers agreed that ethics was a desired key attribute for today's graduate. There is also a convincing research literature on what some scholars refer to as 'teaching for decency and social responsibility' where it is argued that the delivery of ethical principles is an indispensable ingredient of a modern university curriculum.

Graduate Attributes

The recommendations concerning the university's Graduate Attributes address the need to look towards implementing the institution-level graduate attributes recently approved by Academic Board and putting a time on how and when this will be achieved.

Sustainable Education

‘Sustainable education’ is a theme which emerged during the review of coursework. We accept the importance of efficiency and rationalisation, which have been embedded themes in the review discourse at several other tertiary institutions. In the main body of this report we have attempted to problematise the concept within the constraints of the Review. In our many discussions with colleagues and during workshops the issue of efficiency and education was frequently raised, both in the sense that it needed to be addressed, but also, and more pointedly, that colleagues find the notion of ‘efficient education’ underdeveloped and somewhat tainted by government and managerial interference. We have tried to heed feedback and subtly shifted our language towards the idea of a ‘sustainable education’ to provide a more positive environment for institutional dialogue on these matters.

Employability and Employment Outcomes, Research-led Teaching, Internationalisation of the Curriculum

The recommendations pertaining to employability specifically address the themes of Employment Outcomes and Skills Shortage, Research-led Teaching and Internationalisation of the Curriculum. These themes have been thoroughly researched and informed by comprehensive stakeholder surveys. The large scale employer, student and staff survey in particular provides many interesting insights, some of them challenging, many positive, including a range of suggestions which inform future educational goals

7.1 Recommendations

The following principles and recommendations are derived from a large body of research, data and analysis – reports, discussion papers, surveys, consultations, submissions and discussions with stakeholder groups across the Monash network.

It is recommended that:

7.1.1 Integrated Course Delivery

- R1. Monash University endorse the Integrated Course Delivery Model as outlined in Section 5 and encourages all faculties to conform with this model, where possible. The model aligns with the university’s major strategic directions; in particular education underpinned by research strength and internationalisation, and is consistent with the current Qualification Categories Policy.²⁴
- R2. transition and progression pathways be emphasised and strengthened; in accordance with the Integrated Course Delivery Model (Section 5).
- R3. Monash University reconceptualise the honours curriculum in all faculties to facilitate more effective transition into HDR.
- R4. the recommendations of the 2007 Review of Monash College be considered by Faculty AD-Es and Education Committees.

²⁴ [Qualification Categories Policy](#)

- R5. Monash University introduce and encourage Associate Degrees at Gippsland and Berwick Campuses, and explore further the need for alternative pathways at other campuses.
- R6. Monash University distinguishes more clearly postgraduate coursework and research degrees.
- R7. Monash courses reflect a balance between student and employer expectations and academic integrity and canon.²⁵

7.1.2 Curriculum/Pedagogy

- R8. a more inclusive learning environment be developed at Monash University with the introduction of a collaborative curriculum development and teaching framework across faculties and disciplines:
 - a) A 'collaborative teaching' working party to be convened and a reward system and incentives created to encourage faculties to participate.
 - b) By 2010, half of Monash University courses to have a collaborative element e.g. a minimum requirement of at least one minor sequence from another faculty.²⁶
- R9. a taskforce be established to develop a collaborative 'coursework arrangements policy'. It is recommended that the taskforce report both to the ODVC-E and ODVC-I and provide recommendations and advice on the alignment of collaborative coursework arrangements with university objectives across disciplines, faculties, campuses and with national and international partner institutions.
- R10. Monash University embrace the values of choice, breadth and depth, transferability, cross-boundary mobility and the creation of an optimal learning environment as its underlying principles for the delivery of quality education (Section 4).²⁷
- R11. Monash University introduce a greater proportion of generic first year content in faculty and discipline curricula, with a view to sharing embedded content across cognate disciplines. In 2008, embedded generic ethics and a complementing 'Ethics @ Work' service unit to be made available to all Monash students.²⁸
- R12. Monash University to re-conceptualise the nature of minor and major sequences with a focus on the desired student outcomes and competency standards.²⁹

²⁵ [Relevance of the Curriculum Policy](#) and [Course Structure Policy](#)

²⁶ [Establishing Cross-Disciplinary Units Procedures](#)

²⁷ [Relevance of the Curriculum Policy](#)

²⁸ [Course Structure Policy](#)

²⁹ [Course Structure Policy](#)

- R13. a clearer distinction be created at the undergraduate level between education at first year (general), second year (consolidation) and third/fourth year (culmination) level.³⁰
- R14. every course offer students at least one ‘capstone’ experience, either through ‘deep’ major sequences in selected disciplines, or practical learning experiences outside the traditional academic context.³¹
- R15. faculties encourage students to enrol in at least one unit outside their home faculty during the course of their undergraduate degree.³²
- R16. by 2010, all Monash Courses have a ‘practical learning’ component (practicum, work experience, internships and the like), to provide every student with an opportunity to have industry experience.^{33, 34}
- R17. Work-Integrated Learning (WIL) form the conceptual framework for a new nexus between pedagogy and professional praxis, as a joint initiative involving Employment & Career Development and Monash Professional.
- R18. Monash University, through the EPPC Unit Coding Protocols Working Party, unify procedures and introduce a system of unit coding and course points which is internally consistent across the entire Monash network.
- R19. Monash University, through the Assessment Working Party, revisit the relationship between credit points and assessment, and study workload.³⁵

7.1.3 Graduate Attributes

After extensive consultation across the university for a period of four years, the university’s Academic Board at meeting 4/2007 endorsed the following as the Institutional Graduate Attributes for Monash University:

Graduate Attribute 1:

Research-led:

Monash Graduates display an ability to engage in, and share the scholarships of discovery, analysis, integration and application, demonstrating the effects of research-led teaching on their problem-solving skills and broader learning in general.

Graduate Attribute 2:

³⁰ [Course Structure Policy](#)

³¹ [Course Structure Policy](#)

³² [Course Structure Policy](#)

³³ Practical learning denotes more than internships and practica; and may include curriculum content with a strong vocational emphasis.

³⁴ [Course Structure Policy](#)

³⁵ [Assessment of Coursework Policy](#) (An Assessment Working Party is currently revising Assessment Policies)

[Grading Scale Policy](#)

[Course Structure Policy](#) (See Credit Points and Student Workload)

Internationalised:

Monash Graduates display an ability to engage in an internationalised and increasingly globalised world – culturally, ethically, professionally and intellectually.

Graduate Attribute 3:

Communication-competent:

Monash Graduates exhibit written and oral communication skills in a broad range of settings and domains. This will include communicative competence across cultures and genres, both in generic terms and in the context of specific disciplines.

It is therefore recommended that:

- R20. every Monash course reflect the three generic institution level Graduate Attributes of *internationalised*, *research-led* and *communication competent*.³⁶
- R21. Monash University develop an implementation plan for the embedding of the new Graduate Attributes in existing and new curricula to guarantee that, by 2012, all Monash Graduates will have acquired, as a minimum condition, the three institution level Graduate Attributes. A Working Party reporting to Education Committee and led by CALT will oversee the implementation process. The Graduate Attribute implementation plan should include clear guidelines as to the delivery and assessment of the Graduate Attributes.

7.1.4 Sustainable Education

- R22. Monash University subsume notions of effectiveness and efficiency of education under a ‘sustainable education’ approach.
- R23. the extent of duplication in content and/or delivery of units across the undergraduate curriculum, both within and between faculties and campuses, be identified and mapped, and the impact of zero enrolment courses scoped.
- R24. the number of units and courses be capped or reduced to reflect, and add focus to, the university’s vision, mission, and priorities as expressed through central and faculty-based planning documents:
 - a) Monash University have a greater focus on fewer courses with several programmes rather than different courses,
 - b) faculties set an enrolment threshold for all courses based on costing/profitability models. Courses below the threshold to be disestablished, reconfigured or merged with cognate courses,
 - c) discontinue, reconfigure or merge where possible units with an enrolment³⁷ of
 - i. < 30 students at 1st year (3.75 EFTS),
 - ii. < 20 students at 2nd year (2.5 EFTS),
 - iii. < 15 student at 3rd year (1.875 EFTS)

³⁶ [Course Structure Policy](#)

³⁷ [Unit and Course Quotas Policy](#)

(Note: figures expressed in EFTS assume 6 credit point units)

- R25. a review of current unit and course approval processes be conducted, with special attention given to campus matrix models and multi-campus policies. Campuses to be given more flexibility and scope to develop localised content based on local campus expertise and local need.³⁸
- R26. the constraints of timetabling and room allocation on effective and high quality teaching be examined more closely and removed wherever possible.³⁹
- R27. Monash University introduce a scheme where all courses are subject to a desktop review on a five-year cycle, consistent with the recommendations of AUQA. A ‘sunset’ clause to be introduced where any course not reviewed after five years is automatically disestablished.⁴⁰
- R28. Monash University introduce or revise, policy and procedures on naming of degrees and courses.⁴¹
- R29. Monash University faculties develop a matrix identifying education responses to the future skills shortage per faculty/discipline.
- R30. Monash University offer a defined number of high quality professional/vocational degrees and modules which align with the perceived skills shortage.
- R31. Monash University add an ‘education strand’ to the student experience network/framework (to be inclusive of the effect of learning and teaching on general student experience; retention/attrition).
- R32. Monash University re-emphasise its unique strength in the delivery of quality education through double degrees.⁴² While permitting exceptions on strategic grounds, student choices to be limited to double-degree combinations involving:
- i. Generalist-generalist DD (e.g. Arts- Science)
 - ii. Professional-generalist DD (e.g. Arts-IT, Science-Engineering).

7.1.5 Employability and Employment Outcomes

A recurring theme in many of the definitions which appear in the literature and policy documents relates to the potential of an individual to not only secure, but to maintain a job. Instead of a narrow definition, we recommend that Monash University embraces the concept of employability in terms of ‘relative chances’ of acquiring and

³⁸ [Academic Programs offered at Multiple Campuses Policy](#)

³⁹ [Timetabling Policy](#)

⁴⁰ [Establishing, Disestablishing and Amending Coursework Units and Courses Policy](#)

⁴¹ [Course Titling and Abbreviation Policy](#)

⁴² [Course Structure Policy](#) and [Course Review Policy](#)

maintaining different kinds of employment. We therefore recommend that Monash University adopt the following definition of ‘employability’:

R33. *employability may be defined in various ways, but implies the acquisition of traits that secure employment, and a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment – locally and globally - and be successful in their chosen occupations, which benefits themselves, the workforce, their communities and their countries.*

Consistent with this definition, it is further recommended that

R34. Monash University explore in more detail the connection between attrition, retention and employment.

R35. Monash University develop a detailed implementation strategy for the introduction of the new – generic and employability-relevant - graduate attributes into the curriculum. The implementation strategy should make reference to the connection between attrition/retention and employability.

R36. Monash University engage in more detailed institution-internal longitudinal research on graduate destination and employability in order to generate more meaningful data and to overcome the inadequacies of GDS data. In particular, better instruments for the long-term assessment of employability need to be developed.

R37. Monash University allocate the necessary resources for the introduction of an E-portfolio scheme for students in order to facilitate tracking of generic skills and attributes (jobs ‘kitbag’), including:

- a) Identification of skills-sets needed for Life-Long-Learning.
- b) Making more ‘overt’ use of employability skills.
- c) Pursuing a policy of embedding generic employability skills in the Monash curriculum inasmuch as possible.

R38. Monash University, as part of its curriculum approval and review processes, audit the use and integration of employability skills in course materials.

R39. Monash University encourage stronger liaison between faculties, disciplines, and Careers and Employment through appropriate representation on the Employability and Employment Outcomes Committee (E&EOC).

- a) The E&EOC should set the university’s employability agenda, and work with faculties and disciplines to develop an E&EO framework.
- b) The E&EOC should consider special initiatives in relation to international employability.

- R40. Monash University develop a set of benchmarking instruments to measure the extent of 'practical learning' against other leading institutions.
- R41. Monash University encourage stronger liaison between E&EOC and CHEQ in order to develop a survey instrument WEQ (Work Experience Questionnaire) for discipline clusters with strong industry and professional links. WEQ may be developed as a subset of CEQ, or a stand-alone survey tool.
- R42. Monash University introduce appropriate curriculum initiatives aimed at incorporating authentic workplace experience in the curriculum.
- R43. Monash University encourage stronger liaison between E&EOC and Advancement in order to bridge existing gaps in the area of community engagement.
- R44. Monash University consider the establishment of a Community Engagement Framework which connects research and education to the broader community.
- R45. Monash University develop a policy position on the nature of its institutional response to the skills shortage (see also R29 and R30).

7.1.6 Research-led Teaching

Consistent with the other Go8 universities as well as the majority of the Russell Group of universities in the United Kingdom, Monash University has included research-led teaching within its strategic approach to teaching and learning. Generally understood as the framework that integrates the demands of a high quality education within a research-intensive university (see Review of Coursework: Volume 2), it is recommended that the following definition of research-led teaching be adopted at Monash University:

- R46. *research-led teaching and learning are based on the principles of scholarship that involve enquiry, discovery and application of knowledge. In this spirit, the university supports student-centred learning and encourages the integration of the processes (knowledge creation) and products (research outputs) with the processes of teaching and learning.*

In the following recommendations, **principles** that guide the implementation of research-led teaching at the institutional level, have been differentiated from the research-led **policies** that deal specifically with research and teaching. Because of the possible impact on the use of human resources, policies have also been developed for staffing. What follows then are recommended principles and policies presented under four distinct headings; Principles-institutional, Policies-teaching and learning, Policies-research, and Policies-staffing.

It is therefore recommended that the following **principles** be used to guide the implementation of research-led teaching at Monash University:

7.1.6.1 Principles – institutional

- R47. Monash University support strengthening the links between research and teaching across the university.
- R48. Monash University support research-led (discipline-based); research-oriented (enquiry skills); research-based (enquiry-based activities); research informed (pedagogic informed) teaching as just a few exemplars of the link between student learning and research.
- R49. Monash University encourage all faculties to develop and support education and research policies that make explicit the link between research, learning and teaching, in particular for undergraduate students.
- R50. Monash University, in consultation with the faculties, will develop university-wide key performance indicators to measure the progress of Research-led teaching strategy implementation.
- R51. Monash University, in its support for research-led teaching, value excellence in research and teaching in all academic staff.
- R52. Monash University acknowledge there is no “one best way” to embed research-led teaching across all faculties.
- R53. Monash University acknowledge that all students and academic staff, despite their different experiences and levels of expertise, are members of the Monash learning community.
- R54. in view of R53, at Monash University, all academic staff, regardless of level, are encouraged to engage in research and teaching. Staff may either become personally engaged or contribute by way of mentoring colleagues (eg. high profile researchers).
- R55. all undergraduates of Monash University, regardless of their course can expect at least one opportunity to actively engage in enquiry-based learning, appropriate to their subject discipline.
- R56. the link between research and teaching will be achieved by the development of curriculum that encourages student engagement with research, scholarship and consultancy activities. This is of particular importance for undergraduates and postgraduate coursework students.
- R57. Monash University support the development of human resource management policies (such as recruitment, appointment, promotion, performance management, professional development) that prescribe the link between research and teaching.

- R58. Monash University support the establishment of a reward system for academic staff that requires a demonstration of minimum levels of quality in both research and teaching.
- R59. a committee of Academic Development to be established by the University's Academic Board to co-ordinate and support faculties' initiatives to strengthen the link between research, teaching and learning.

Within these umbrella principles, specific policies for teaching and learning, research and staffing have been developed. It is further recommended that

7.1.6.2 Policies – Teaching and Learning

- R60. as far as is practicable, all Chief Examiners of all units to be research-active academics.
- R61. in the first year units of undergraduate courses, teaching teams include a reasonable mix of academics who are specialists in teaching and learning, research and both research and teaching.
- R62. each subject discipline or department establish a team of academic staff with expertise in pedagogical issues in higher education. It is the role of this group of staff to evaluate all new unit/ course applications as well as unit/ course reviews.
- R63. all undergraduate and postgraduate students have been required to undertake at least one research project appropriate to their discipline of study.⁴³
- R64. all undergraduates have undertaken at least one assessment task that requires knowledge and understanding of research processes within their selected major.⁴⁴
- R65. all courses (undergraduate and postgraduate) include at least one lecture per annum from a Level D or Level E academic, preferably about their research outputs and/ or their processes of enquiry.
- R66. all Honours programmes involve at least one research methods unit.⁴⁵
- R67. all postgraduate courses (except where professional accreditation precludes this) include an elective on current research outputs (ie. research on contemporary issues).
- R68. on-line unit evaluations and MonQuest evaluations include student responses to their experience of research processes and/ or products.

⁴³ [Course Structure Policy](#)

⁴⁴ [Assessment of Coursework Policy](#)

⁴⁵ [Honours Year Programs Policy](#)

- R69. all units and courses be regularly reviewed by a team of discipline “experts” to ensure currency of knowledge, approaches and debates in the discipline.⁴⁶
- R70. all successful applicants to the university’s teaching and learning fund will be required to submit a paper for publication as one of the project’s expected outcomes.
- R71. applicants for Carrick Institute Awards to be encouraged, where practical, to identify and/or develop a research project from their teaching and learning practise.
- R72. no unit be taught from a text-book only; all units to provide supplementary scholarly readings.
- R73. all departments offer at least one seminar per year to showcase undergraduate student research and enquiry.

7.1.6.3 Policies – Research

- R74. where deemed desirable, each research team of more than three academic staff or on an externally-funded project of more than \$100,000 to appoint an adjunct staff member (to be included in their teaching workload) to develop relevant curriculum from the research teams’ research findings.
- R75. where possible, research conducted by Monash researchers be used to inform the content and/or development of new units and/or courses.
- R76. where possible, internal research grants be made available within faculties for pedagogy-based research relevant to the discipline.

7.1.6.4 Policies – Staffing

- R77. all on-going ‘teaching and research’ staff appointments be required to demonstrate experience in both research and teaching with demonstrated excellence in either, relevant to the vacant position.
- R78. all on-going academic staff appointments as far as is practicable, require staff regardless of level, to teach a minimum of 12 hours per annum, preferably spread across undergraduate and post-graduate level.
- R79. professional development training in research and teaching and learning be made available to all academic staff.
- R80. one criterion for promotion include attendance at, or delivery of, at least one professional development activity on both research and teaching and learning within three years prior to application.

⁴⁶ [Academic Review Policy](#)

- R81. preference be given to the employment of sessional teaching staff with Masters' and PhD degrees (or their equivalent).
- R82. all students enrolled in HDRs be encouraged to undertake sessional teaching duties.
- R83. where practicable, all sessional teaching staff be encouraged to enrol in HDRs.

7.1.7 Internationalisation of the Curriculum (IoC)⁴⁷

By any measurement, whether it be international student enrolments, university staff with overseas experience, recruitment of staff from overseas, the establishment of campuses and centres overseas, partnerships with overseas universities, participation in international research projects, position in international rankings and so on, Monash University is an international university. And yet, if other measurements of internationalisation were to be considered, Monash may appear to be less successful in “engaging the world.” Although the university’s Academic Board has, as recently as March, 2005, approved a set of policies and procedures on the internationalisation of the curriculum (IoC), at this stage there is little evidence of formal efforts within the university to implement these policies or procedures.

It is apparent from a review of recent literature in the field of internationalisation of higher education detailed in the Discussion Paper on IoC (Review of Coursework: Vol 2), that in order for the university to remain competitive within the international market, the university must seriously commit to the operationalisation of the policies and procedures.

Because the current IoC policies and procedures were approved in 2005 after an extensive and exhaustive period of consultation across the university, it is recommended the university affirm the definition of IoC which reads thus:

- R84. *at Monash University Internationalisation of the Curriculum means the provision of curricula, pedagogies and assessments that foster understanding of national and global perspectives, and of how these intersect and interact with personal perspectives. Learning experiences at Monash will develop students’ ability to engage with multiple frameworks, contrasting value-systems, and open-ended situations.*

In view of their currency and continued relevance, it is further recommended

- R85. that the policies and procedures of the Internationalisation of the Curriculum be reaffirmed.

To facilitate the implementation of the policies and procedures of IoC across all faculties and on all campuses, it is further recommended that

⁴⁷ [Internationalisation of the Curriculum Policy](#)

- R86. a Working Party be established to develop appropriate criteria to measure the progress of the implementation of internationalisation of the curriculum policies and procedures in all faculties, taking into account the implications of IoC in different disciplines.

In light of R84, R85 and R86 in particular, it is recommended that the following principles are used to guide the implementation of Internationalisation of the Curriculum at Monash University, having due regard to the fact that Monash University needs to further strengthen its commitment to enhancing students' international experience by:

R86 cont'd:

- a) providing an international learning experience to local students.
- b) providing a local learning experience to international students (facilitate local content as an international experience for international students).
- c) providing access where deemed appropriate, to specialised curriculum content for international students.
- d) ensuring that our curricula provide content with parts offered off-shore by local faculty members.
- e) strengthening its emphasis on international interdisciplinary content.
- f) facilitating greater exposure to curricula that specifically address cross-cultural skills.
- g) offering curricula that add a comparative (international) dimension to a traditional context.
- h) incorporating curricula with international content (i.e. non-adapted content).
- i) providing internationalised content (i.e. adapted content).
- j) providing enhanced opportunities for the formation of international learning communities.
- k) providing stronger connections between teaching and international research; and combine more stringently research, curriculum development and internationalisation.
- l) creating curriculum content promoting the ability to solve problems in a variety of locations and cross-cultural settings.
- m) creating curriculum content enabling students to work with people who are culturally diverse.

- n) creating curriculum content enabling students to develop skills to live and work in a changing globalised world.
- o) offering, wherever possible, a curriculum that has an international career orientation (e.g. curricula leading to internationally recognised professions).

The following policy recommendations (R86 p) - cc)) create a context for future benchmarking and further recognise, and strengthen, Monash's position as one of the leading international universities in Australia and globally. It is recommended that this be achieved by

- p) establishing a task force on language and learning capacity and usage which, through the use of suitable survey tools and the involvement of CHEQ, gather data on existing practice and intercultural potential.
- q) expanding the 'BA (Global)' to other faculties. In particular, double-degree combinations involving the BA should be augmented to include the BA (Global).
- r) increasing the proportion of foreign language courses and units in relation to the total number of course and units on offer.
- s) increasing the proportion of EFTSL in foreign language units in relation to the total number of EFTSL in non-foreign language units taken.
- t) increasing the number of foreign language teaching hours per week (all languages).
- u) augmenting its student mobility scheme with stronger emphasis on participation by non-English-speaking institutions and countries.
- v) should continue to increase the number of teaching staff from diverse linguistic and cultural backgrounds.
- w) auditing and increasing the number of places offered in programmes for international application training in relation to the total number of students.
- x) increasing the number of places offered in programmes providing information about countries/cultures/societies in relation to the total number of students.
- y) Further analysing, in order to draw on its considerable 'inter-cultural capital', enrolment and pathway patterns of graduates of foreign nationality.

- z) further disseminating data (attrition, pathways, performance) on the proportion of graduates of foreign nationality in relation to the total number of graduates.
- aa) collecting further data on the ratio between international first-year students and graduates of a given starting year of studies.
- bb) establishing processes, perhaps through its alumni network, for collecting information and tracking international engagement and employment of graduates.
- cc) encouraging cross-faculty initiatives between the Faculty of Education and the Faculty of Arts in order to address identified skills shortages in a number of LOTEs.

8 POLICY AND APPROVALS PROCESSES

The recommendations of the Review of Coursework have implications for many current university and faculty policies and practices. There are a number of key relevant university level policies which need to be invoked. Once the Review has received an indication from the university as to which recommendation will be approved, further dialogue will follow with the Office of PVC (Planning) and the Education Planning and Policy sub-Committee of Education Committee.

9 RISKS

The Monash University budget process 2008 has omitted to make available an operational budget for the implementation of the Review of Coursework recommendations. Faculties and departments may take the view that although it will naturally be incumbent on them to carry out and follow through on a range of implementation tasks and responsibilities; there has been no additional budget allocation at Faculty level. There is no central unit that would have the resources to guide and liaise with faculties and disciplines. While some faculties have already commenced the process of restructuring and rejuvenation, there is unlikely to be a concerted university-wide effort unless targeted incentives are created.

In addition, it is worth noting that there exist a number of issues with the availability, quality and intelligibility of data in general, and we feel there is a strong case for a comprehensive process review. EPIC has invested considerable resources in obtaining, cleaning and collating data from responsible university departments. For example, the unavailability of unit profiling mechanisms (expected in early 2007 and finally launched, with limited functionality, by CHEQ at LTQC in September 2007) has impacted on the work of EPIC and continues to impact on Faculty's abilities to develop a better understanding of their education, especially in the context of cross-faculty initiatives. The nature and delayed submission date of a CHEQ employer survey has also affected our ability to include some of the findings. Fortunately, EPIC was able to develop its own survey instruments and produce a comprehensive survey which matches student, staff and employer expectations. Individual reports have been produced for faculties and will be distributed shortly. An important feature of the EPIC employer survey is that its main focus is forward looking: it goes beyond the 2003 and 2007 CHEQ methodology and investigates future employer expectations, rather than measure employer satisfaction with former Monash graduates.

10 CONCLUDING REMARKS: GAINING COMMITMENT FROM STAKEHOLDERS

While this project is ostensibly about teaching and learning at Monash University, it is clear that to shift from policy formulation to implementation requires considerable behavioural change from faculties, departments and individual staff. At a time when all levels of the university are grappling with the demands wrought by the Research Quality Framework (or its latest incarnation), any efforts to impose further change from the university's executive level must be carefully considered. If the implementation of the Education Plan and the Review of Coursework is perceived by faculties as yet another compliance task demanded from the centre, research on the experiences of large-scale institutional change suggest there is a poor chance of success. Just a brief glimpse of the organisational change literature is all that is required to identify many of the pitfalls that face imposition of change onto an unwilling workforce. The concept of resistance to change is well-known in management literature and it is generally understood that resistance within a university can take many creative forms. It is essential then for the successful implementation of the Education Plan and the Review of Coursework that resources be committed to minimising resistance.

Examples of approaches to change that garner employee commitment and engagement include meaningful communication with all primary stakeholders and the provision of opportunities for staff to explore how they can implement the change in ways relevant to their discipline or circumstances. Further, there is a need for professional development support and the development of reward systems that encourage behavioural change. It is clear then that in order to gain commitment from the primary stakeholders to ensure the success of the project and subsequent strengthening of the position of Monash in the higher education market, that principles of organisational change programmes need also be addressed.