MAPPING AND EMBEDDING SUSTAINABLE GRADUATE CAPABILITIES IN LAW

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I. Introduction: Time for Change in Legal Education

There is a climate of 'readiness for change'[1] in higher education, and nowhere more so than in Law. Universities are embracing curriculum renewal, including by incorporating graduate capabilities or attributes,[2] in response to 'the demands of a changing, discriminating and competitive higher education marketplace' and the rapidly changing world of work. Legal education is now characterised by 'stakeholders [who] demand that law faculties be accountable at every level for the quality and efficacy of the professional education they offer'.[3]

Dramatic change in the 1970s coincided with the expansion of higher education and the abolition of tuition fees under the Whitlam federal government. Newer and more progressive law schools moved from conducting traditional black letter lectures, often delivered by legal practitioners (the 'what is' model of teaching law), to the Socratic method, built on student-centred learning, small-group teaching and 'law in context' (the 'what ought' model). Such approaches prioritised critical thinking, case analysis, oral communication skills, and legal problem-solving, as well as doctrinal learning. Teachers were more likely to be fulltime or career academics, rather than practitioners. Legal education tended to be conceptualised as separate from legal practice.

Law schools have proliferated since then, with student numbers increasing to previously unthinkable levels. Many of the pedagogical gains have been lost or compromised. Most law schools have at least partially reverted to lectures; overall reductions in face-to-face class time have occurred in some instances; and greater reliance has been placed on sessional staff, larger classes, and more conventional curricula, all driven by shrinking resources and funding models that prioritise discipline-based research at the expense of teaching. The didactic teaching practices

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1   Deborah Southwell, Deanna Gannaway, Janice Orrell, Denise Chalmers, Catherine Abraham, 'Strategies for effective dissemination of project outcomes', A Report for the Carrick Institute for Learning and Teaching in Higher Education (2005) <http://www.altc.edu.au/resources-strategies-dissemination-uq-2005> at 18 December 2009, cited in Sally Kift, 'Mapping Law Curriculum for Quality Learning Engagement' (Paper presented at the Macquarie University Law School Retreat, Sydney, 9–10 December 2008).

2   In Australia, the terminology underpinning the skills movement is used loosely; see S Barrie and J Jones, 'Integration of Academic Writing Skills in Curriculum: Making Them Stick' in Chris Rust (ed), *Improving Student Learning — Improving Student Learning Outcomes* (1999) 268–279; the terms generic/core/transferable competencies, skills, attributes or capabilities are often used interchangeably: see Janet Jones, 'Generic Attributes: An Agenda for Reform or Control?' (Paper presented at Changing Identities: Language and Academic Skills Conference, University of Wollongong, 29–30 November 2001). According to Sharon Fraser, 'capability is a much broader concept than skills and attributes or competencies, rather it is about "fitness for specified purpose"': see Sharon Fraser 'Reframing the Discourse: A Graduate Capability Framework for Macquarie' (2007) <http://www.mq.edu.au/ltc/pdfs/capabilities_discussion_paper.pdf> at 18 December 2009. Fraser cites John Stephenson, 'The Concept of Capability and its Importance in Higher Education' in J Stephenson and M Yorke, *Capability and Quality in Higher Education* (1998).

3   Sally Kift, *Harnessing Assessment and Feedback to Assure Quality Outcomes for Graduate Capability Development: A Legal Education Case Study* (2002) 1, Australian Association for Research in Education <http://www.aare.edu.au/02pap/kif02151.htm> at 27 November 2009.

of the past have again become the norm, despite clear evidence that active learning strategies and engagement are essential for good outcomes. Didactic teaching practices are particularly inappropriate given the rapidity of change in the external and workplace environments, and the short 'use-by' date of much doctrinal knowledge.

In the current wave of change, the question now is not whether legal education should change, but how best to effect change, what change, and in pursuit of which goals? A further question addressed in this paper is how change can be embedded and sustained over time and avoid becoming the latest educational fad. According to Fullan,[4] a 'fundamental shift of mind' will be required, since modern educational systems are

> fundamentally conservative. The way that teachers are trained, the way that [institutions] are organized, the way that the educational hierarchy operates, and the way that education is treated by political decision-makers results in a system that is more likely to retain the *status quo* than to change.

Although Fullan is describing school-level education, many of his comments apply equally to higher education. One significant difference is teacher training, where higher education fares even worse than secondary and primary education. Training in teaching has been conspicuously absent in most universities outside education faculties, contributing to the heavy emphasis on doctrinal and discipline-based content. Most academics identify themselves primarily or solely in terms of their discipline and scholarship within that discipline, rather than their teaching role, entrenching conservative practices.

The shift to graduate capabilities as a guiding principle in curriculum design necessarily mandates a more hands-on and student-centred style of teaching. One of the benefits of such an approach is forcing many in higher education to think deeply for the first time in several decades not just about what they teach, but also about how and why that teaching occurs, in what context of work and professional practice, and the desired final product (graduate). This may be one avenue by which Fullan's 'fundamental shift of mind' can be achieved.

Legal education has been the subject of detailed review in Australia, the United States of America, United Kingdom (UK), Hong Kong, Canada[5] and elsewhere in recent years, with

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4   Michael Fullan, *Change Forces — Probing the Depths of Educational Reform* (1993) 3. Fullan's work relates to school education but is just as relevant to higher education, which lags behind other sectors at the pedagogical level.

5   See, eg, in Australia: Dennis Pearce, Enid Campbell and Don Harding, *Australian Law Schools: A Discipline Assessment for the Commonwealth Tertiary Education Commission* (1987); C McInnis, S Marginson and A Morris, *Australian Law Schools After the 1987 Pearce Report* (1994), Department of Employment, Education Training, Canberra; Australian Law Reform Commission, *Managing Justice: A Review of the Federal Civil Justice System*, Report No 89 (2000); Richard Johnstone and Sumitra Vignaendra, *Learning Outcomes and Curriculum Development in Law* (2003); Australian Learning and Teaching Council (ALTC)/Council of Australian Law Deans (CALD), *Learning and Teaching in the Discipline of Law: Achieving and Sustaining Excellence in a Changed and Changing Environment*: *Final Report* (2009); Review of Higher Education Financing and Policy, *Learning for Life: Final Report* (1998) (West Review of Universities); CALD, *Review of Australian Higher Education: Questions for Discussion, CALD Submission* (2008) <http://www.dest.gov.au/NR/rdonlyres/7DBB3799-744D-4EB9-971F-5CA98930401B/23456/275CouncilofAustLawDeans.pdf> at 27 November 2009. See, eg, in the United States of America: American Bar Association, Section of Legal Education and Admissions to the Bar, *Report of The Task Force on Law Schools and the Profession: Narrowing the Gap* (1992) (MacCrate Report); American Bar Association, Section of Legal Education and Admissions to the Bar, *Teaching, Learning and Professionalism: Report of the Professionalism Committee* (1996); The Carnegie Foundation for the Advancement of Teaching, *Summary of the Findings and Recommendations from Educating Lawyers: Preparation for the Profession of Law* (2007). See, eg, in the United Kingom: Lord Chancellor's Advisory Committee on Legal Education and Conduct, *First Report on Legal Education and Training* (1996); The Law Society of Scotland, Education and Training Committee, *The Future of Legal Education, Training, and CPD: Report to the 2009 AGM* (2009). See, eg, in Canada: Canadian Bar Association,

reports noting dramatic changes over the last three decades to the nature of professional practice and the context within which legal education occurs. The reports expressed dissatisfaction with the current state of legal education and that 'a radical reconsideration of the principles which underlie [it] has not recently been undertaken.'[6] Other scholars have canvassed this issue very thoroughly,[7] so we will provide only a brief overview .

According to the Carnegie Foundation:

> today's law school experience is severely unbalanced. The difficulty lies in the relentless focus on the procedural and formal qualities of legal thinking … sometimes to the deliberate exclusion of the moral and social dimensions and often abstracted from the fuller contexts of actual legal practice.[8]

While acknowledging that analytical thinking and discipline knowledge are priorities in legal education, the Carnegie Foundation stressed that 'priority should not be misconstrued as sufficiency', and that legal doctrine

> often comes most fully alive for students when the power of legal analysis is manifest in the experience of legal practice … [P]ractical skill is developed through modelling, habituation, experiment and reflection … requir[ing] settings and pedagogies different from those used in the teaching of legal analysis… [P]rofessional identity joins [legal analysis and practical skill] and is … the catalyst for an integrated legal education.'[9]

The Australian Law Reform Commission (ALRC) argued in its *Managing Justice* report[10] that curricula should focus on 'what lawyers need to be able to do [rather than being] anchored around outmoded notions of what lawyers need to know'.[11] The West Review of Universities[12] also highlighted the desirability of broader generic skills, including reflective thinking; technical/

Committee Responding to Recommendation 49 of the Systems of Civil Justice Task Force Report, *Attitudes–Skills–Knowledge: Proposals for Legal Education to Assist in Implementing a Multi-Option Civil Justice System in the 21st Century* (1999). See, eg, in Hong Kong: The Steering Committee on the Review of Legal Education and Training in Hong Kong, *Legal Education and Training in Hong Kong: Preliminary Review, Report of the Consultants* (2001).

6   The Law Society of Scotland, *The Future of Legal Education and Training* (2006–2007) <http://www.lawscot.org.uk/training/consult> at 27 November 2009.

7   See, eg, Kift, 'Mapping Law Curriculum for Quality Learning Engagement', above n 1; Sally Kift, '21st Century Climate for Change: Curriculum Design for Quality Learning Engagement in Law' (2008) 18 *Legal Education Review* 1; Sally Kift, 'Harnessing Assessment and Feedback to Assure Quality Outcomes for Graduate Capability Development: A Legal Education Case Study' (Paper presented at the Association for Active Educational Researchers Conference, Brisbane, December 2002); Sally Kift, 'Integrating the Knowing, the Doing and the Practice for Radical Curriculum Renewal' (Paper presented at the International Conference on the Future of Legal Education, Georgia State University College of Law, Atlanta, Georgia, 20–23 February 2008); Sally Kift, 'Curriculum Design Challenges for 21st Century Legal Education' (Paper presented at (Dis)integration — Designs on Law Curriculum: Learning in Law Annual Conference, University of Warwick, Coventry, 3–4 January 2008).

8   The Carnegie Foundation for the Advancement of Teaching, above n 5.

9   Ibid, quoted in Susanne Owen and Gary Davis, 'Some Innovations in Assessment in Legal Education, Assessment: Role', material created as part of ALTC/CALD, *Learning and Teaching in the Discipline of Law: Achieving and Sustaining Excellence in a Changed and Changing Environment*: *Final Report*, above n 5.

10 Australian Law Reform Commission, above n 5, citing the MacCrate Report, above n 5. The Carnegie Foundation for the Advancement of Teaching, above n 5, quoted in Susanne Owen and Gary Davis, 'Some Innovations in Assessment in Legal Education, Assessment: Role', material created as part of ALTC/CALD, *Learning and Teaching in the Discipline of Law: Achieving and Sustaining Excellence in a Changed and Changing Environment*: *Final Report*, above n 5.

11 Australian Law Reform Commission, above n 5, 2.20.

12 Review of Higher Education Financing and Policy, *Learning for Life: Final Report* (1998) (West Review of Universities).

theory competence; intellectual curiosity; effective communication; research; problem-solving and teamwork; and ethical standards.[13]

Given such general dissatisfaction, law schools are rethinking their educational approach to align curricula with evolving industry expectations for the profession and to produce graduates able to rise to the challenges of the modern world.

Focusing on graduate attributes compels us to examine and challenge not just teaching practices and content, but also the aims of legal education and the premises that underpin it. A main premise is that, in a life/work context of rapid and relentless change, modern professionals need to be lifelong learners. Curriculum redesign, beginning with mapping and embedding generic graduate attributes, is essential to this. Most universities have developed their own statements of desirable graduate attributes or capabilities, and significant work has been done at the national level.[14] Early attempts to introduce skills in a 'bolted-on'[15] fashion have given way to a more generalised understanding of the need to integrate and sequence capabilities across an entire curriculum and at varying levels of sophistication. However, there is still much work to do at the implementation level.

This article discusses current work at Macquarie Law School in redesigning the curriculum to inculcate clusters of skills in a scaffolded learning sequence, so that graduates are able to exercise both the doctrinal knowledge base expected of lawyers and adopt a more collaborative, cross-disciplinary and sustainable process of enquiry that will support their functions as analysts, facilitators, researchers and innovators.

II. GRADUATE CAPABILITIES

Graduate capabilities are the 'qualities, skills and understandings a university community expects its students to develop and consequently shape the contribution they are able to make to their profession and as a citizen'.[16] While employability is a key factor, graduate attribute statements should extend well beyond the workplace. This is particularly necessary for the discipline of law, since modern legal education is marked by 'a pervasive tension between the notion of legal education as essentially professional training … and legal education as education in an intellectual discipline' located more broadly within the humanities and social sciences.[17]

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13 Ibid, cited in ALTC/CALD 'Reimagining the Law: Graduate Attributes'(Paper presented at Australasian Law Teachers Association Conference, Cairns, 6–9 July 2008).

14 Eg, ALTC/CALD, *Learning and Teaching in the Discipline of Law: Achieving and Sustaining Excellence in a Changed and Changing Environment*: *Final Report*, above n 5, ch 5.

15 Simon C Barrie, 'A Research-Based Approach to Generic Graduate Attributes Policy' (2004) 23(3) *Higher Education Research and Development* 265.

16 John Bowden et al, 'Graduate Attributes and Generic Capabilities' in *Generic Capabilities of ATN University Graduates* (2000) <http://www.clt.uts.edu.au/ATN.grad.cap.project.index.html> at 1 December 2008.

17 Professor Michael Coper, 'Learning and Teaching in the Discipline of Law: Achieving and Sustaining Excellence in a Changed and Changing Environment' (Paper presented to the Carrick Institute for Learning and Teaching in Higher Education, Perth, 1 October 2007).

There have been many attempts to identify the range of skills required by graduates[18] and law graduates.[19] Many skills that are generic in other contexts are discipline-specific for law, such as analytical and critical thinking, problem-solving, construction of argument, evaluating evidence, and advocacy and negotiation. The Council of Australian Law Deans (CALD) has identified the key skill groupings required of law students as:

(i)   discipline specific body of knowledge and skills;

(ii) social and intellectual capabilities: oral and written communication, teamwork/ initiative/ independence/creativity, critical thinking/problem solving, scholarship, professional practice; and

(iii) attitudes and values: ethics, professionalism, lifelong learning, diversity and social justice, indigenous perspectives, internationalisation and global citizenship, future oriented.[20]

Employability skills are a subset of graduate attributes, with many areas of overlap. Typical skill-sets include: communication, teamwork, problem-solving, self-management, planning and organisation, technology, lifelong learning, initiative and enterprise.[21] Another formulation lists critical thinking, problem-solving, teamwork and decision-making skills.[22]

These deceptively brief lists need to be fleshed out before they become useful. For example, 'professionalism' is defined by CALD as:

'an attitude or stance towards work and activity', that carries with it associated graduate attributes or descriptors such as 'consummate legal professional'; [possessing] skills in lateral thinking and problem solving which enable the provision of appropriate advice and solutions, not only in litigation but over a range of alternate dispute resolution mechanisms; uphold[ing] the highest ethical standards in discharging his/ her responsibilities to clients, other professionals, the courts and the public; pursu[ing] lifelong learning in a dynamic discipline.[23]

The impact of shifting from designing curricula with substantive content to designing for capabilities is starkly illustrated by the following comparison. Consider these graduate capabilities identified by one university:

1.   discipline specific knowledge and skills;

2.   critical, analytical and integrative thinking;

3.   problem solving and research capability;

4.   creative and innovative;

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18 See, eg, in Australia: Precision Consultancy for the Business Industry Higher Education Collaboration Council, *Graduate Employability Skills: Report* (2007) Australian Government, Department of Education, Employment and Workplace Relations <http://www.dest.gov.au/ highered/bihecc> at 27 November 2009. See, eg, in the United States of America: Partnership for 21st Skills, *Learning for the 21st Century: A Report and Mile Guide 21st Century Skills* (2002) <http://www.21stcenturyskills.org> at 27 November 2009. See, eg, in the United Kingdom: Lord Sandy Leitch, *Prosperity for All in the Global Economy — World Class Skills: Final Report* (2006) Department of Business Innovation and Skills <http://www.dius.gov.uk/> at 27 November 2009 (Leitch Review of Skills).

19 See, eg, Patrick Keyzer, *Legal Problem Solving: A Guide For Law Students* (1994); William Twining (ed), *Legal Theory and Common Law* (1986); M Le Brun and R Johnstone, *The Quiet (R) evolution: Improving Student Learning in Law* (1994).

20 ALTC/CALD, *Learning and Teaching in the Discipline of Law: Achieving and Sustaining Excellence in a Changed and Changing Environment*: *Final Report*, above n 5.

21 Precision Consultancy for the Business Industry Higher Education Collaboration Council, above n 18, cited in Kift, 'Mapping Law Curriculum for Quality Learning Engagement', above n 1.

22 United States of America: Partnership for 21st Skills, above n 18. See also list compiled in Leitch Review of Skills, above n 18.

23 CALD, above n 13.

5. effective communication;
6. engaged and ethical local and global citizens;
7. socially and environmentally active and responsible;
8. capable of professional and personal judgment and initiative;
9. and commitment to continuous learning.[24]

Compare these general graduate capabilities with, for example, the specific areas of knowledge prescribed for a torts unit by the NSW Legal Practitioners' Admission Board:

1 Negligence including defences.
2 A representative range of torts (other than negligence) and their defences.
3 Damages.
4 Concurrent liability.
5 Compensation schemes.

OR

topics of such breadth and depth as to satisfy the following guidelines:

The potential compass of this area is so large that considerable variation might be anticipated. At the very least, there should be a study of negligence and of a representative range of torts, with some consideration of defences and damages, and of alternative methods of providing compensation for accidental injury. Examples of these topics are: concurrent liability, defamation, economic torts, nuisance, breach of statutory duty and compensation schemes.[25]

The demands imposed by the two types of framework are divergent in terms of both curriculum design and delivery. A capabilities focus is so different — in nature as well as in the knowledge, skills and attitudes demanded of teachers and learners — that it cannot help but be the catalyst for improvement in learning and teaching. However, shifting from doctrinal to capabilities-based education has limited value unless the capabilities are sustainable; that is, unless they are self-supporting and equip students to be continuous and lifelong learners.

III. Sustainability: A Framework for Embedding Graduate Capabilities

The framework outlined below draws on the environmental concept of sustainability to suggest how innovation in legal education can be embedded and maintained over time in an organic and dynamic process of renewal.

One of the puzzles that bedeviled early work on generic skills (as graduate capabilities used to be called) was transferability. It became apparent that skills acquired in one context could not necessarily be applied successfully in other contexts. Generic skills were also valued because of their potential to promote and enable lifelong (sustainable) learning. This re-focused attention on learning outside formal didactic settings and methodologies. Experiential learning, peer-assisted learning and peer tutoring, reflective practice, self-evaluation, learner-managed learning, student-centred learning, andragogy, all received their fair share of attention. Modern notions of sustainability encompass all of these and much more, providing an extremely useful framework for interrogating learning and teaching issues and designing curricula (including embedding graduate capabilities). In this 'Decade of Education for Sustainable Development',[26] the framework is particularly compelling.

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24 Office of the Macquarie University Provost, *Review of Academic Programs, White Paper* (2008) Macquarie University <http://www.mq.edu.au/provost/reports/docs/SenateFINALWHITEPAPER_revised.doc> at 27 November 2009.
25 *Legal Practitioners Admission Rules 1994* (NSW) sch 5.
26 See, eg, United Nations Educational, Scientific and Cultural Organisation, *Learning Our Way to Sustainability* (2009) <http://www.unesco.org/en/esd/> at 27 November 2009.

Macquarie University is working towards embedding sustainability as a 'core value'. In 2007, the University commissioned *State of Play*, a report from the Australian Research Institute in Education for Sustainability, as part of its vision to embed sustainability into the daily practices and procedures of the University.[27] While the report benchmarked the traditional sustainability areas of energy, water and waste, it also investigated sustainability in learning and teaching, research and human resources. In 2008, Macquarie University began a comprehensive review of academic programs, starting with defining graduate capabilities. The White Paper outlining Macquarie University's framework for the future of learning and teaching, referred to above, was published in July 2008. The initial component of the White Paper contained the graduate capabilities framework, as set out in Figure 1. Sustainability has been identified as one of the defining themes described as a 'guiding principle within which the curriculum is developed.'[28] Note that the sustainability principle specifically includes 'commitment to continuous learning' (lifelong learning), 'creative and innovative' capabilities, and 'socially and environmentally active and responsible' attitudes and behaviour.

Figure 1: Macquarie University graduate capabilities

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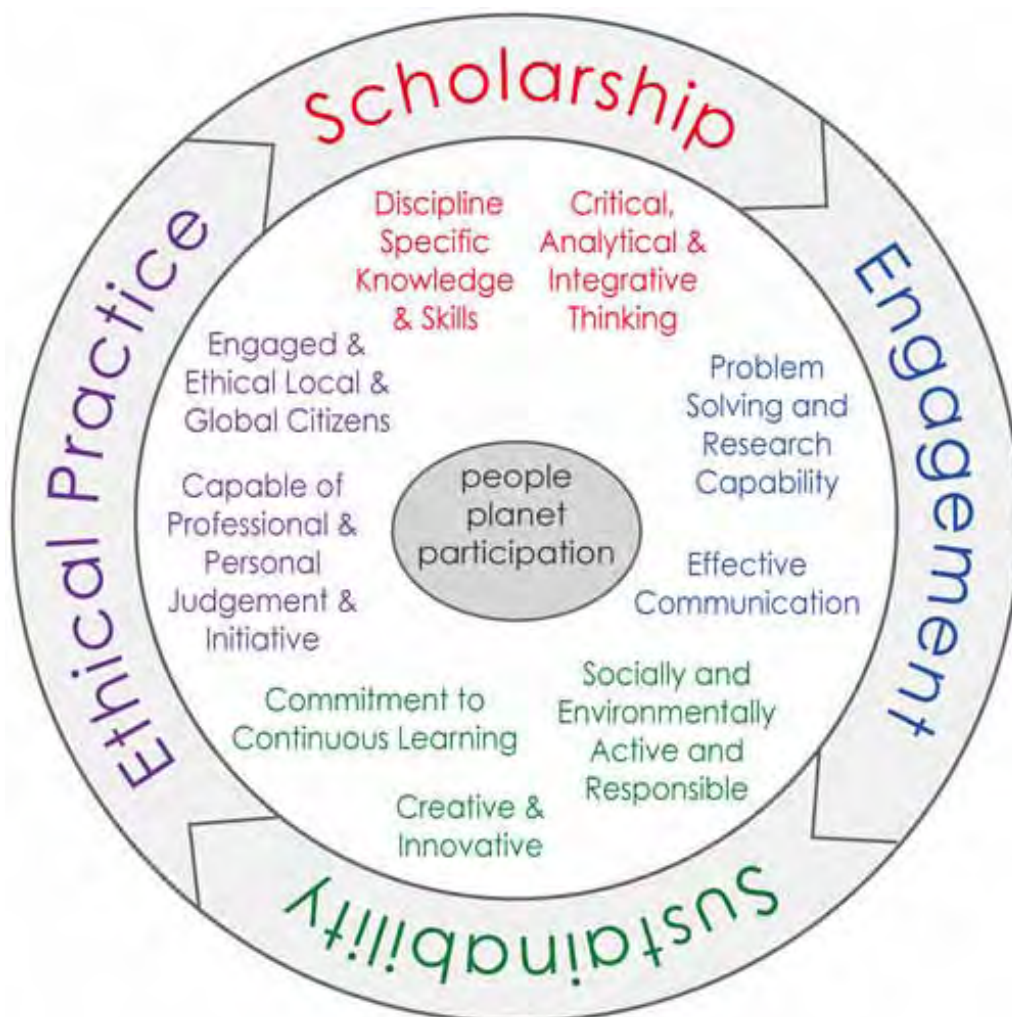
27 *State of Play*, Australian Research Institute in Education for Sustainability (ARIES), Macquarie University, 2007; see also Macquarie University, *Sustainability@MQ* (2009) <http://www.mq.edu.au/university/sustainability.html> at 27 November 2009.

28 Office of the Macquarie University Provost, above n 24.

Sustainability[29] has various hotly contested meanings, but in essence it references environmental, economic and social responsibilities, and concerns both process and substance. It has at its core integrated decision–making; socio-cultural and economic equity; inclusion of all stakeholders; valuing services; and protection of endangered or weaker key elements (not necessarily limited to the environment; for example, biodiversity conservation). Whether there is any difference between sustainability (which is in popular usage) and sustainable development (the key wording in international legal documents) is a topic for another context. Regardless, both require a balance between economic, social and environmental concerns, with a strong social justice foundation.

The classic definition of sustainable development is contained in the Brundtland Commission Report, which defines it as 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs'[30]. In that sense, it balances wants against needs. In the legal context of sustainable development, the next key document is the *Rio Declaration*, which set out 25 principles of sustainable development.[31] In Australia (and elsewhere), in the context of environmental legislation, these principles have been honed down to five key elements:

1. Integration of economic, environmental and social issues in decision-making.
2. Biodiversity conservation.
3. Precautionary principle.
4. Intergenerational equity.
5. Improved valuation, pricing and incentive mechanisms.[32]

The sustainability framework is helpful for analysing legal education in three ways. First, it applies to decision-making, and requires full participation of all stakeholders in that process. This applies just as much to the development of curricula as to any other type of decision-making, and mandates an inclusive partnership between learners and teachers, with systematic input from employers and other stakeholders, having regard to access and equity issues. Education for sustainability aims to develop learners' skills, abilities and motivation. Learners are at the centre of the active participatory experience, with learning, facilitation and decision-making in the hands of the learners themselves.[33]

Secondly, the notion of intergenerational equity — that is, thinking beyond this generation to make sure the next generation is not disadvantaged by the decisions of the present — encourages forward thinking. Certain curriculum design questions might be generated by applying this second limb of the sustainability framework, for example:

• Which core values do we want future generations to adopt?
• Which attitudes to learning, to work, to legal practice and law?
• Which values relating to ethics, social justice and personal and corporate responsibility?

29 We are very much indebted in this section to our colleague, Dr Erika Techera, for her generous assistance, expertise and passion for all things concerned with sustainability.

30 *Report of the World Commission on Environment and Development: Our Common Future*, UN Doc A/42/427 (1987) (the Brundtland Report).

31 *Rio Declaration on Environment and Development, Report of the United Nations Conference on Environment and Development*, UN Doc A/CONF.151/6/Rev.1 (1992). In education, the seminal document is the *Talloires Declaration* signed in 1990 in which Universities committed to environmental sustainability. The text of the declaration is available online but it really goes to sustainable actions rather than processes. See University Leaders for a Sustainable Future, *The Talloires Declaration* (1990) <http://www.ulsf.org/programs_talloires_td.html> at 27 November 2009.

32 See, eg, *Protection of the Environment Administration Act 1991* (NSW) s 6(2).

33 Recommendations, IUCN Commission on Education and Communication, February 2004, 52.

- Which cognitive skills need to be developed to facilitate the above? Answers might include attributes such as creativity, innovation and collaborative and cooperative problem-solving skills.

Thirdly, pricing and incentive mechanisms are relevant. In the environmental context, such mechanisms are intended bring ecosystems and their processes into the financial accounting of society's activities; for example, the way the oceans assimilate waste would be included in a social costing of pollution control. In an education context, however, it could be used to ensure that all aspects of the curriculum and university core business are valued, making learning and teaching, and related scholarship, equal priorities alongside disciplinary research. In this way, balance and diversity are maintained so that the two are mutually supportive and feed into one another at all levels. Revision of structural factors such as selection and promotion criteria, workload, patterns of work, and reward and recognition systems will be required in many institutions. For example, current Department of Education, Science and Training definitions of research do not count writing student texts and publishing in professional legal journals as 'research'.[34] This is a perfect example of the nonalignment between teaching and research objectives, which can lead only to impoverishment of learning and teaching, to diminution of the research–teaching nexus, and to less rather than more integration and articulation between the law school and professional practice.

Sustainable learning, including organisational learning, is learning that endures; it is organic in the sense that can adapt and reconfigure to meet changing demands. By definition, then, it must be process- and skill-based rather than solely content-based, and it must be centred on well-defined graduate capabilities. Embedding a sustainable capabilities curriculum depends heavily on stakeholder buy-in. This can be achieved by creating a culture of commitment to excellence in learning and teaching as core business, firmly linked to scholarship and professional learning and development, with embedded quality assurance processes and continual renewal. Practising what we preach — that is, treating sustainable learning and learning outcomes for students as a core value — can be made easier by ensuring that we actively engage in sustainability ourselves in all our processes and practices, including those related to the curriculum.

IV. Attribute Mapping

A. The Mapping and Design Process

The process of mapping graduate attributes corresponds to five steps in the curriculum design process. The first step is to decide on what specific knowledge, skills and values are desirable in graduates; to create a framework of strategic or generically defined capabilities that reflect these; and to decide which enabling capabilities should be clustered around them. This is normally done at the institutional level. A stocktake of content and outcomes is then performed, identifying what is currently taught and/or assessed, and where and how this occurs. Comparing desired attributes with those already embedded pinpoints gaps in the existing curriculum and forms the basis of the redesign and implementation of the new curriculum. Capabilities need to be embedded in identified locations in the curriculum process and structure, addressing:

(i) objectives, activities and assessment;
(ii) learning support measures required to enable students to deal with the curriculum;
(iii) equity and access issues;
(iv) both risks and opportunities for diverse students in different delivery modes (face-to-face, distance, blended);
(v) innovation in learning technology and learning spaces;
(vi) professional development required to support enhanced graduate capabilities;

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34 The position is similar in the UK: see, eg, Fiona Cownie, 'Are we Witnessing the Death of the Textbook Tradition in the UK?' (2006) 3(1) *European Journal of Legal Education* 79.

(vii) structural and functional change that may be required in the organisational fabric of the institution; and

(viii) comprehensive linkages along the learning process from school, tertiary institution, to the postgraduate and professional environments.

Evaluating the changes is the final step. Measures need to be developed for determining success, focused on learning outcomes for students, but also taking into account the sustainability of the changes over time in terms of resourcing and other factors. A regular review and redesign process for gathering and responding to feedback also needs to be developed and implemented.

B. The Mapping Activity at Macquarie Law School

In 2008–09, the Macquarie University Law School consulted its academics, as well as considering developed models of attributes in other institutions, to compile its own list of graduate attributes and map their placement and usefulness in the curriculum. Certain descriptors of positive human personality were identified as some of the most prominent indicators of what kind of graduates the School should be producing. Characteristics identified included: capable of leadership; dedicated, focused, disciplined; empowered and empowering; possessing maturity, judgment, self-awareness; resilient, robust, stamina; articulate, coherent, elegant; typified by ethical and professional conduct; respectful; inclusive; selflessness, desire for community service; multi-reflective paradigmal capacity; possessing a global and comparative perspective; and cultural awareness.

These were then categorised against the nine graduate capabilities laid down by Macquarie University for all graduates, as well as being compared to attribute lists developed by other legal education institutions. This matrix is currently being refined into a discipline-specific set of attributes embedded in study units in the Bachelor of Laws program.

C. Models Used in Mapping

Macquarie Law School used three models to map, assemble and relate graduate attributes. In Figure 2 below, we present the general template used to stocktake the content in each study unit of the Bachelor of Laws program. In this phenomenographic analysis, examples of learning activities were categorised against each learning objective of the study unit and scaled by level of autonomy, with subsequent analysis describing nodes of commonality between identified activities. The mapping sought to identify how these commonalities worked (or did not work) in concert across all units in the program to create recurring and cascading experiences in autonomous, collaborative and continuous learning.

Figure 2: Template for stocktake of graduate capabilities in each study unit

	Intended level of attribute development			
	ATTEND & PARTICIPATE	**RAISE AWARENESS**	**DEVELOP UNDERSTANDING**	**FACILITATE AUTONOMY**
STATED LEARNING OBJECTIVE 1	learning activity	learning activity	learning activity	learning activity
STATED LEARNING OBJECTIVE 2	learning activity	learning activity	learning activity	learning activity
STATED LEARNING OBJECTIVE 3	learning activity	learning activity	learning activity	learning activity
STATED LEARNING OBJECTIVE 4	learning activity	learning activity	learning activity	learning activity

In our next phase we condensed all the learning activities compiled in the stocktake template (Figure 2) into a list of tasks which are common across activities, based on and adapted from the capability analysis model of Willison and O'Regan,[35] illustrated in Figure 3. For example, Willison and O'Regan have broken down the research capability into increasingly sophisticated facets of inquiry, and described activity in that facet against increasing levels of autonomy. In Figure 3, a graduate who can engage in communication about an open enquiry (that is, with unlimited terms of reference) and with a self-determined structure, is considered to be a highly sustainable learner for that capability. We are compiling similar matrices for other major capabilities represented in the curriculum.

Figure 3: Explicit task analysis matrix for research capability

		LEVEL OF STUDENT AUTONOMY				
		LEVEL I Closed enquiry High degree of structure	LEVEL II Closed enquiry Some structure	LEVEL III Closed enquiry Independent	LEVEL IV Open enquiry Structured guidelines	LEVEL V Open enquiry Self-determined guidelines
FACET OF ENQUIRY	Embark, determine a need	**LEAST SUSTAIN-ABLE**				
	Find/ generate					
	Critically evaluate					
	Organise					
	Synthesise, analyse, apply					
	Communi-cate					**MOST SUSTAIN-ABLE**

Thirdly, the task matrices developed in Figure 3 are reflected back onto the stocktake template in Figure 2. If a learning activity involving *research capability* has been listed in the template for a particular study unit, what are the explicit *research* tasks and autonomy level (as in the Willison and O'Regan model) which can be identified in that learning activity? We are using this approach to standardise the description of each and every learning activity in all the units of study.

The final step is to collate examples of each capability from different doctrinal areas into capability groupings. So, as shown in Figure 4 below, examples of 'teamwork' capabilities would be collated from doctrinally-based study units in torts, criminal law, governance and other units. A similar exercise would occur for research capability, for cultural capability, and so on. The aim is not merely to map the static location of a capability in each particular study unit (which is of limited use), but to visualise the progression of the development of the capability through subsequent learning activities located in the pre-program, introductory, intermediate, advanced and post-program levels of the Bachelor program, and to make some judgment as to

35 John Willison and Kerry O'Regan, *The Research Skill Development Framework* (2006) The University of Adelaide <http://www.adelaide.edu.au/clpd/rsd/framework> at 27 November 2009.

whether that progression is coherent, continuous and focused. Does the progression result in a capability which is sustainable?

Figure 4: Paradigmal analysis

DOCTRINAL SPECIALIST **Doctrines:** torts criminal law governance immigration law international law **Doctrinally-based statements:** eg. legal practitioners accreditation rules **Descriptors:** prescribed doctrinal knowledge eg, torts concepts, statutes, cases	**CAPABILITY SPECIALIST** **Capabilities:** teamwork capability research capability cultural capability IT literacy capability professional ethics capability creativity/innovation capability **Capability-based statements:** generic grad caps statements eg, Macquarie University grad caps **Descriptors:** cognitive & collaborative activities eg, Willison and O'Regan model

V. CONCLUSION

One immediate benefit of the reflective discussion used in this mapping process was that teachers were prompted to examine the effectiveness of their unit's structure. Some came to the conclusion that, while certain attributes were desired, they were not being specifically attained by students in the self-contained activities in that unit of study. Teachers were nonetheless of the view that capabilities are taught at an exemplary level, but that the actual development of the capability in each student occurred in an organic fashion through repeated, overlapping and cascading exposures to the skills, knowledge and values in several units of study and over an extended period of time.

Continuous development and layering of skills and understanding in the student sits well with the sustainable learning principles which have been discussed in this article. That is, multi-dimensional integrative thinking; the use of challenging ('risky') learning experiences supported by enabling programs (learning support); and diversity. The effective application of learning to contemporary sustainability challenges in the community requires the integration of diverse perspectives. Indeed the sustainability of learning itself depends on a student's education experiences being multi-dimensional and integrative in nature. Unlocking the vast potential in students rests more than anything on understanding that exemplary pedagogy is not about what is learned but about how it is learned. To create sustainable learning capabilities, learners must be at the centre of the learning experience. They must be empowered and responsible for it, and must be aware of their own learning process. The design of curricula needs to focus therefore on bringing that awareness or meta-cognition to the fore, and on providing learning support consistent with the learning challenges presented.

A paradoxical conclusion of the Macquarie University Law School's mapping study was that law teachers repeatedly emphasised that, although collaborative work is the primary source of diversity in the student's learning, there is relatively little teamwork formally built into curricula. Collaborative learning promotes the exchange of knowledge and perspectives between individuals from different discipline backgrounds. Most innovation occurs at the boundaries of disciplines, where cross-fertilisation by other disciplines allows existing knowledge to be seen in new contexts and used in new ways, and the interaction of different skills from disparate disciplines is a generator of new kinds of knowledge. Successful individuals in highly innovative

organisations are often polymaths or 'Renaissance' individuals — and those organisations value collaboration for its cross-fertilisation effects and as the primary driver of innovation. The discipline of law is to some extent pre-adapted to develop polymaths in that its core capabilities include analysis and synthesis, the fundamental re-examination of philosophies and moral perspectives, and the interpretation and redevelopment of legal and institutional structures that drive social reform and political regimes.

The traditional persona of lawyers, however, is of driven individualists, and this is reflected in much of the design of curricula where students are asked to research and reflect on a diversity of subject matter but very much within their individual work style and work ethic. It seems, therefore, that the natural openness of the discipline of law to diverse and integrative learning is let down by the conventional design of many learning activities. Therefore, a greater emphasis is required on collaborative learning opportunities in order to (i) foster a collaborative learning style in law students and inculcate it as a lifelong habit (a sustainable learning style); and (ii) create learning environments within curricular activities where students are repeatedly exposed to cross-fertilisation of ideas, to active and critically-structured debate, and to practice in integrative thinking.

More specifically, Macquarie law teachers saw capabilities taught in terms of a moving spread or range of achievement rather than a single targeted competency with a single defined performance value or outcome. Capabilities are developed in students progressively and adaptively, with each student progressing differently on each type of capability, and acquiring greater proficiency in it as they participate in various units of study which also contain that capability in some form. The teachers often expressed an appreciation of the diversity of student needs (for example, distance versus face–to-face learning, or students of non-English speaking backgrounds versus local students), and of the different learning styles and preferences that naturally occur. While indicators of student achievement were described and quantified by teachers within their units, the key achievement parameter was often expressed in the form of 'by the end of the program we want them to be able to …' This is consistent with the notion that the embedding of capabilities is neither an action wholly defined at the boundaries of units of study (or the boundaries of the Bachelor program for that matter), nor an easily charted and predictable course for each student as they progress through the program. As mentioned, it fits with a notion of lifelong learning, in that the process has no end, it is unique to the learner, and it evolves with their unique learning experiences.

In our analogy with sustainability principles, we have discussed a pedagogical path whose timeframe is not simply the student's life but is enriched by intergenerational and cross-generational learning, and which recognises the continuous learning process which is observed in the conduct of the law curriculum. Thus a key ongoing challenge for the curriculum is being able to demonstrate to students the great extent to which generic learning capabilities can leverage traditional doctrinal law content. This article began by recognising the current dissatisfaction with doctrinally-dominated legal education, and it concludes with the thought — graphically represented in Figure 4 — that a paradigm shift is needed in legal education so that learning becomes about capabilities which transcend discipline content. There is a need to embrace cognitive and collaborative activity descriptors of who a lawyer is, what a lawyer does, and the ongoing value and innovation which can be added with not only law discipline knowledge, but with any knowledge. A capability descriptor which was developed for one of our senior level units puts it succinctly:

> Pursuit of knowledge is the very essence of being a lawyer. Reflection is ongoing in the program, and requires deep thought about engagement in the critical analysis that [students] experience and studies have encouraged.[36]

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36 Debra Ronan, LAW 438 Access to Justice Placement program.