

SUSTAINABILITY IN KEY PROFESSIONS: ACCOUNTING

AN ACTION RESEARCH PROGRAM

Final report March 2010



Australian Government
Department of the Environment,
Water, Heritage and the Arts





PREFACE

This report provides the outcomes and recommendations emerging from an action research program which aimed to create change for sustainability in the accounting profession and in the operations of accounting schools and disciplines within accredited institutions.

The program was conducted by the Australian Research Institute in Education for Sustainability (ARIES), funded by the Australian Government Department of the Environment, Water, Heritage and the Arts (DEWHA), and supported by Macquarie University. Participants included representatives of a range of universities, business and finance, government, professional associations and professional representative bodies.

A program that aims to bring about change within an entire profession is taking on an ambitious task that requires a high degree of cooperation and coordination between a range of professional associations and academic institutions. It requires consultation with business, industry, finance and government groups, and must be mindful of the nationally and internationally significant implications of such change.

Through this research program ARIES sought to identify institutional 'gaps' in the organisation and coordination of accounting education. The program then sought to facilitate the filling of those gaps, recognising that key players in accounting are best placed to enunciate and elucidate

the needs and the requirements of the profession. The role of ARIES has been to facilitate, consult and ultimately to provide a forum for dialogue. The accounting profession offered an opportunity for change implementation that can hopefully be used as a model for other key professions.

This report has useful lessons for the accounting profession, for business and industry organisations, universities and governments who are interested in bringing about change through embedding sustainability in professional education and training.



ARIES PROGRAM TEAM ACKNOWLEDGEMENTS ENQUIRIES

Program conception

This research program was framed and developed by the Australian Research Institute in Education for Sustainability (ARIES). Professor Suzanne Benn as Director of ARIES framed the vision for this program and was responsible for seeking funds for its development. ARIES expresses its gratitude to Emeritus Professor Dexter Dunphy for his expert advice and assistance in initiation of this program and his invaluable contribution to the roundtable forum. The program also thanks Dr Fran Steele for her invaluable assistance in the structuring and framing of the final report.

Program Manager

Andrew Martin.

Program advice

Prof Suzanne Benn.

Authors of this report

Andrew Martin and Frances Steele.

Editorial and research assistance

Jessica North and Anna Knutzelius.

Program participants

ARIES expresses its gratitude to the participants in the Roundtable forum and the accounting schools, colleges and institutes that participated in the baseline survey of sustainability teaching in accounting courses. Thanks are due to CPA Australia, the Institute of Chartered Accountants, the Australian Accounting Standards Board and the Financial Reporting Council, the Australian Institute of Company Directors, the Business Higher Education Roundtable, the Council of Environment Business Australia, the Department of Education, Employment and Workplace Relations, Ernst & Young – Australia, the Financial Services Institute of Australasia, PricewaterhouseCoopers in Australia, Professions Australia, the St James Ethics Centre, Universities Australia, Westpac, and representatives of Macquarie University, the University of Technology Sydney, the University of New South Wales, Monash University and the University of Queensland.

Acknowledgements

The Australian Government Department of the Environment, Water, Heritage and the Arts initiated and funded this program. Without this generous support this project would not have been possible.

Thanks are also due to a number of academics and others who provided valuable insights in the early stages of this project and lent their wisdom to the Roundtable forum: Associate Professor Geoff Frost and Doctor Rosina Mladenovic from Sydney University; Professor Mark Gabbott, Associate Professor Lorne Cummings, Gordon Boyce, James Hazleton, Associate Professor Stephen Chen and Doctor Leigh Wood from Macquarie University; Professor Margaret McKernan from the University of New South Wales; Professor Thomas Clarke and Deputy Vice-Chancellor Patrick Woods from the University of Technology, Sydney; and the indefatigable John Purcell of CPA Australia.

Enquiries

The Australian Research Institute in Education for Sustainability Graduate School of the Environment Macquarie University NSW 2109

ariescoordinator@gse.mq.edu.au

(02) 9850 8597



ABBREVIATIONS

ALTC	Australian Learning and Teaching Council
ARIES	The Australian Research Institute in Education for Sustainability
BHERT	Business/Higher Education Round Table
CPA	CPA Australia
CPD	Continuing professional development
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSR	Corporate social responsibility
DEWHA	Australian Government Department of the Environment, Water, Heritage and the Arts
ESG	Environmental, social and governance
FINSIA	Financial Services Institute of Australasia
GRI	Global Reporting Initiative
IFAC	International Federation of Accountants
Institute	The Institute of Chartered Accountants in Australia
MBA	Master of Business Administration
NAP	Australian Government National Action Plan for Education for Sustainability
OECD	Organisation for Economic Cooperation and Development
SKP	Sustainability in the Key Professions
TBL	Triple bottom line



CONTENTS

Preface	i	3 Scoping the issues	34
Acknowledgements	1	3.1 'Fining down' the issues	34
Abbreviations	2	3.2 The issue of baseline data	36
Executive summary	4	3.3 The issue of accreditation	39
1 Sustainability in accounting	8	4 Dialogue with stakeholders	42
1.1 A national priority	8	4.1 The future role of accountants – changing modes of regulation	42
1.2 Sustainability and accountants – the broad picture	9	4.2 Universities, professional associations and accounting education	43
1.2.1 The need for this project	9	4.3 Problems of an interdisciplinary approach	43
1.2.2 Defining sustainability	10	4.4 Essential skills	43
1.2.3 Global drivers of change for sustainability	11	4.5 Defining a broader agenda	44
1.2.4 Local and national drivers of change for sustainability	12	4.6 Sustainability in the Key Professions – a continuing program	44
1.2.5 Accounting education in the global context	14	5 Critical reflection on action	46
1.2.6 Overseas students and accounting education	15	5.1 Roundtable forum	46
1.2.7 The structure of accounting in higher education	15	5.2 Survey	48
1.2.8 The importance of 'soft skills'	18	5.3 Process of change	48
1.2.9 Research on stakeholder attitudes	21	6 Key findings and recommendations	50
1.2.10 Summary of barriers and drivers	26	6.1 Drivers, barriers and opportunities	50
1.3 Key research issues	27	6.2 Recommendations	52
2 About the program	28	7 Bibliography	54
2.1 Action research and education for sustainability	28	Appendix 1: Questionnaire	60
2.2 Action research and iterative learning	29	Appendix 2: Participants at roundtable	65
2.3 Action research and the accounting profession	30	Appendix 3: Agenda for roundtable discussions	66
2.4 Phase 1	30	Appendix 4: Overseas student participation	67
2.4.1 Selection of key stakeholders	30		
2.4.2 An initial discursive exchange	30		
2.4.3 Literature review	31		
2.5 Phase 2: Description of actions	31		
2.5.1 Baseline data on sustainability content	31		
2.5.2 Developing opportunities for an expanded discourse	32		

EXECUTIVE SUMMARY

A key strategy of the Australian Government's *National Action Plan* for living sustainably is to foster sustainability in business and industry through education and learning. Through partnership, the intention is to build capacity in business and industry to plan, adopt appropriate frameworks and tools, and harness incentives to make changes for sustainability.

In addition, corporations are conscious of growing pressures on them to institute forms of corporate sustainability or social responsibility accounting. Government, employees, investors, customers and the general public increasingly demand improved corporate sustainability and transparency.

The accounting profession provides a crucial range of advisory, regulatory, reporting and financial services to corporations, both in-house and externally. Yet, despite awareness of the need for integration of concepts of sustainability in many academic circles, and the acceptance by the professional accounting associations of the relevance of these concepts to the future of the profession, little integration of sustainability factors has been evident.

This project was carried out by the Australian Research Institute in Education for Sustainability (ARIES) and funded by the Australian Government Department of the Environment, Water, Heritage and the Arts. ARIES worked with partners in the accountancy profession with the aim of building their capacity to make change towards sustainability.

The overarching research question for this project was: *What are the drivers and barriers to progressing the integration of sustainability into the accounting profession?*

The project adopted an 'action research' methodology, and was carried out in two phases. The first phase involved scoping the scale of the problems in integrating sustainability into accounting as a key profession. In this phase the literature, including previous ARIES projects, was reviewed and preliminary contacts with key stakeholders were made. Research questions were then refined, and actions determined.

The second phase involved implementation of the agreed actions and a critical reflection on this process in order to provide impetus to the action program.

Drivers and barriers

The literature review, examining the global, national and local drivers for sustainability suggested that a range of factors work strongly in favour of integrating sustainability in professional accounting training. These include:

- national and state policies promoting sustainable industry
- industry-level drivers for corporate social responsibility
- support for change from professional associations in accountancy
- media awareness of sustainability issues
- global accreditation in the profession recognising sustainability as an important element.

Despite these drivers, only limited inclusion of sustainability in accounting has been achieved. Likely barriers include:

- lack of knowledge about how to direct established content toward sustainability outcomes
- impacts of student demand for established forms of accountancy accreditation
- absence of accreditation criteria that would enable 'soft skills' associated with sustainability to be given priority in higher education courses.

Core and soft skills for sustainability

Some sustainability skills are technical or core skills, including risk assessment and assessment of environmental, social and governance (ESG) performance. Many sustainability skills also belong to the category of soft skills. The literature strongly debates the importance of the inclusion of 'soft skills': communication; teamwork; leadership; problem solving; and personal effectiveness. Accountancy in higher education attracts a large number of overseas students but this clientele is widely perceived to prefer an emphasis on core skills over soft skills.

Main areas of investigation

Following the literature review and the early scoping discussions with key stakeholders, three main areas for action were identified:

- the need for baseline data that would indicate current practice in sustainability education in Australia
- the requirement to develop accreditation criteria that would reflect the importance of sustainability skills and content
- the lack of high-level dialogue about sustainability integration, which has resulted in a difference between the views of stakeholders in industry and those in higher education.

Actions

Each of these areas was the subject of further investigation through the action research process, involving:

- development of a baseline survey of sustainability content and skills currently incorporated into accountancy courses in Australian universities
- mapping of the main organisations and bodies that influence accreditation in accountancy in Australia
- convening of a Sustainability in the Key Professions Roundtable involving representatives from industry, professional associations and higher education – this forum was used to discuss the drivers and barriers to inclusion of sustainability in higher education accountancy courses and accreditation criteria.

The roundtable was convened in conjunction with the Business/ Higher Education Round Table (BHERT) – an existing body with a membership of about 25 universities plus a wide range of sponsoring businesses and professional and industry groups. BHERT became an important partner organisation in this aspect of the project. As a result of the Roundtable discussion a working party was set up with the intention of extending the use of this model, for dialogue between industry and higher education stakeholders, to other key professions.

“ The overarching research question for this project was: *What are the drivers and barriers to progressing the integration of sustainability into the accounting profession?* ”

EXECUTIVE SUMMARY

Key findings

Following an analysis of the preliminary and roundtable discussions, together with the literature review, the key findings of this project are:

1. The accounting profession is affected and driven by **global pressures** for change for sustainability which are **felt unevenly across the profession**, probably due to client resistance. Business pressures, such as those derived from the **investment and finance sectors**, and the persuasive **influence of governments**, play the most significant role in driving change. However, **international standards** of the accounting profession and **national accreditation** systems can act as a **barrier to change** because of **international competition for student numbers**.
2. More needs to be done to improve the **perception of sustainability skills**, so that courses featuring the development of these skills are seen as providing a **competitive advantage** both for students and universities, rather than as an unfashionable or unnecessary option.
3. While it is important to consider the **resources** issues raised by academics, it is the **issue of communication** that deserves priority. That is, it is reasonable to assume that appropriate communication of the competitive advantage to be gained from acquisition of skills that are key discriminators in employment, which include sustainability skills, will drive student demand and equally that resources will be developed to meet that demand.
4. The **most important considerations** centre on the needs and demands of the **profession's clients**. They appear to be **dissatisfied with the lack of skills** required for a changing and more demanding economic environment, currently **demonstrated by accounting graduates**.
5. **Prospective employers of accountants seek skills appropriate to a sustainability agenda**. They indicate that, when choosing between two graduate candidates, each possessing equivalent 'core skills', they are more likely to engage the one who demonstrates 'soft skills', including communication, teamwork and problem-solving.
6. There is a strong perception of a **division within the profession**, between those who see no need for the development of new skills, including sustainability capabilities, and those who recognize that these skills are in demand. This mirrors a wider debate within business schools, as identified in earlier ARIES projects (see notes 15 and 22 below).
7. **The commitment of the professional associations** to provide leadership in embedding accounting for sustainability within their organisational strategies and operations is timely and significant. It needs to be complemented with support from **leaders of business and industry** to promote **recognition of the significance of accountants** in the design and implementation of sustainability reporting systems to a wider audience and the need to graduate **more accountants with adaptable skills**.
8. **The most significant barriers to change** appear to stem from the **attitudes** of students and some academic accounting staff who resist the adaptation of accounting courses to encompass 'soft skills' supporting sustainability, on the basis that there is no client demand for such skills, thereby misreading the demands of industry and business.

Recommendations

Based on these key findings the principal recommendations of this report are:

1. The existing **core skills of accountants should be adapted** to address sustainability issues through appropriate inclusion of both relevant technical skills and 'soft' skills. We recommend an approach whereby **sustainability principles become incorporated as part of a broader strategy for improving skills in communication, teamwork and problem solving** while exposing students to the challenges of, for example, evaluation of assets and services in a manner that takes account of resource usage, life-cycle analysis and polluter-pays principles, and assesses the risks to business associated with climate change.
2. More emphasis should be placed in all courses on the **role of accountants in advising and informing critical decision-making**. While sustainability reporting may require transdisciplinary cooperation, accountants should have the primary responsibility as 'key information providers'.
3. **A transdisciplinary approach to developing communication skills, teamwork skills and problem-solving skills** is probably best achieved by requiring students to partake in some form of **compulsory experiential learning**, or by the introduction of **mandatory core units focussed on communication** with other disciplines (e.g. 'communicating with engineers', 'communicating with scientists').

4. There is a need for a revised, **expanded curriculum**, a more effective education process, and a better articulated structure for the institutional units through which the programs are offered.

- Universities should consider establishing a combination degree program with a related discipline or developing accounting/ systems or accounting/ finance degrees.

- Based on what is regarded as 'best practice' in the structure of Master of Business Administration (MBA) programs, courses should be restructured to inform students of a wider range of vocational options and offer opportunities and understandings to develop skills more directly focused on those options.

5. **Accounting courses should be more closely integrated with other business disciplines** at accredited universities. A common core of mandatory subjects could include experiential learning or courses focussed on communication. While this might impose a marginally greater burden on students, it could be balanced by offering a range of vocationally focussed qualifications at the conclusion of a basic degree. Core subjects designed to develop communication and decision-making skills could be accredited as part of an accounting/systems or accounting/finance degree, or count towards a combination accounting/MBA or specialist degree in, for example, accounting/public management.

6. Professional associations should be encouraged to **accredit only programs that present accounting as an economic or decision-making development and distribution function** and should themselves foster and endorse innovative approaches to restructuring of accounting programs, and publicise the significance of changes to accounting courses, teaching methods and standards.

7. **Improving communication** between the professional associations, the universities, business and government in regard to the development of future skills for accountants is the **most significant recommendation of this report. Business, industry and government all have a role in providing accounting students with a platform for vocational experience** and in working more closely with universities and the professional associations to provide opportunities to explore the relevance of concepts such as sustainability to their future field of practice.

Key outcomes

In summary, the key outcomes from this project are:

- an extensive literature review of drivers and barriers for change in the accountancy profession
- a systemic map of drivers for change in relation to sustainability in the accountancy profession
- formation of the first multi-stakeholder Working Party to progress discussion concerning sustainability related skills development for the accountancy profession
- partnership with BHERT to progress the model developed in projects for application in this and other professions and industry sectors
- development of a questionnaire to establish baseline data for sustainability education in accounting – this will also act as an awareness-raising tool as its content included the development of 66 sustainability-related topic areas.

The development of the inaugural Sustainability in the Key Professions Roundtable model for dialogue between key stakeholders in the professions has the potential to bring about systemic change across a range of industry sectors. Bringing together universities, professional associations, professions and industry stakeholders in discussion around sustainability will facilitate future-oriented skills development and research capacity.



1 SUSTAINABILITY IN ACCOUNTING

This chapter provides an overview of the background to this program; and the importance of this project is discussed in relation to national priorities. A brief literature review is provided, setting out the context for the program. This review takes into account:

- documented barriers to progressing sustainability integration into the accounting profession
- current practice, and opportunities for enhancing sustainability education in accredited accounting qualifications
- how Australia compares to other countries in that regard.

The main research questions are then elucidated in relation to this discussion of current policy and literature.

1.1 A national priority

A key strategy of the Australian Government's National Action Plan for sustainable living¹ is to foster sustainability in business and industry. Through education for sustainability, the intention is to build capacity in business and industry to plan, adopt appropriate frameworks and tools, and harness incentives to make changes for sustainability. One of the themes of this policy framework is the development of partnerships:

Partnerships are a key feature of successful sustainability initiatives. Partnerships provide opportunities for learning and should be fostered within and between government, non-government, business, industry and other organisations. Effective partnerships value diversity and the new perspectives and opportunities they provide. (p. 13)

The aim of these partnerships is to bring about collaborations toward sustainability between higher education systems and those in the key professions. The relevant sections of the National Action Plan state:

2.2.4 Sustainability for key professions

The Australian Government will work with appropriate partners to promote integration of sustainability into professional learning qualifications and university degree accreditation. This project will research incorporating sustainability into university courses for key professions such as engineering, accountancy, economics, law, architecture, planning and teaching. Priority will be given to those professions with the greatest and most immediate impact on sustainability outcomes. This work will build on the existing work of the Australian Research Institute in Education for Sustainability with business schools and teacher education institutions. (p. 23)



1

3.2 Peak partnerships for sustainability

The Australian Government will work with peak industry bodies, professional associations and non-government organisations, using existing networks where possible, to develop and deliver workplace learning, professional development, mentoring for sustainability, and sharing best practice. (p. 25)

Accountants are regarded as one of the professions with most immediate impact on sustainability, through their links with a wide range of industry and economic activity. This ARIES project works with partners in the accountancy profession, with the aim of building their capacity to make change towards sustainability.

1.2 Sustainability and accountants – the broad picture

1.2.1 The need for this project

The accounting profession provides a crucial range of advisory, regulatory, reporting and financial services to business, from both in-house corporate positions and external roles. Given the commercial pressures and legal obligation of public corporations to maximise profits, the functions of the accounting and finance professions affect operational priorities. There are increasing demands by employees, investors, customers and the general public for improved corporate sustainability and transparency:

Graduates are asking about a business' ESG [environmental, social and governance] policy in interviews, employee retention is becoming increasingly important for many businesses, and consumers are taking their own actions to combat climate change by demanding carbon

neutral goods and services. Environmental incidents are heavily fined and publicised, requiring costly repairs to damaged corporate reputations. Exchange indices such as the FTSE4Good and Dow Jones Sustainability Indices are influencing investors, as are the 'Principles for Responsible Investment' issued by the United Nations Environment Programme (UNEP) Finance Initiative. Locally, the forthcoming Australian Emissions Trading Scheme will put a real cost on carbon emissions, making efficiencies important to controlling costs within a business. In addition to these ESG reporting pressures, recent events on Wall Street have demonstrated the risks of a reliance on backward looking financial reporting.²

For sustainability to permeate organisational operations, decision-making and the allocation of resources, the accounting, economic and finance professions need to understand the range of considerations and develop further practices that can account for sustainability impacts.

1 SUSTAINABILITY IN ACCOUNTING

*Accountants capture and analyse vital corporate information upon which much corporate decision making is based. Their technical expertise, plus their ability to think plus create, are a powerful combination that makes them fundamental to the capture and reporting of sustainability practices and business success.*³

The need for promotion of integration of sustainability into professional learning qualifications and university degree accreditation has been recognised in academic literature for at least twenty years. At the commencement of this project the main professional associations made it clear they were keenly conscious of the same need.

For example:

- In October 2008 the Institute of Chartered Accountants in Australia launched its flagship reporting tool – *Broad Based Business Reporting: The Complete Reporting Tool*
- In early 2009 CPA Australia published its annual report for 2008 in accordance with the principles of the Global Reporting Initiative (GRI)⁴
- Not long after, both professional organisations took up membership of the Accounting for Sustainability Forum, an international body sponsored by HRH the Prince of Wales.

Yet, despite awareness of the need for integration of concepts of sustainability in many academic circles and the acceptance by the professional associations of the relevance of these concepts to the future of the profession, little integration was evident. Over the last 10 years there has been little change towards embedding sustainability in accounting curricula in the majority of accounting schools. The question to be asked was: *Were there institutional barriers or gaps in communication which were inhibiting implementation of change?* In those circumstances it became significant to examine a broad picture of global, national and local drivers and barriers to progress in integration of sustainability into the accounting profession.

Accountancy is a profession that has wide appeal to international students. The national education system for accountancy has the potential to influence how sustainable development is put into practice in other parts of the world. The appeal of accountancy as part of the global education economy also influences the needs and priorities of educators in the profession.

Our research commenced with an examination of global drivers of change for sustainability, reviewing the concepts of sustainability and globalisation. From there it proceeded to examine global initiatives of particular relevance to the accounting profession, before considering local and national drivers for change and the role of accountants within that broad framework.

1.2.2 Defining sustainability

There are a range of global environmental issues that have been recognised internationally, as evidenced in international treaties such as the *Rio Declaration*.⁵ Those issues include, indisputably:

- exponential growth of human populations
- decreasing availability of arable land, increased desertification, soil loss and loss of biodiversity
- decreasing ability of populations to access reliable water supplies of adequate quality
- declining stocks of energy-producing minerals
- an increase in the volume of atmospheric greenhouse gases, producing multiple effects, notably global warming.

These impact on each other and are cumulative. Climate change represents the accumulated effect of the other areas of major concern and is therefore perceived in the public mind as the 'core issue' of environmental concerns. Environmental issues also come with a social and political cost. A map of the world's most troubled political areas corresponds closely with a map of the world's most environmentally degraded areas, or areas where there is the greatest competition for natural resources – a map of pollution hot-spots would encompass the zones of greatest poverty. The economic impacts of environmental problems are often subtle in their manifestation.

³ Alex Malley, *President's desk: October 2008 Sustaining good business*: http://www.cpaaustralia.com.au/cps/rde/xchg/cpa/hs.xsl/724_30427_ENA_HTML.htm (12 February 2009).

⁴ See note 8 below.

⁵ United Nations, *Report of the United Nations Conference on Environment and Development (the Rio Declaration) (1992)* United Nations General Assembly, Rio de Janeiro, 3–14 June.

The world approach to environmental concerns was first expressed in the *Brundtland Report* which urged nations to adopt the approach of sustainable development, which it defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. The report allowed that 'interpretations will vary, but must share certain general features and must flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it'.⁶ Sustainability has been described as a concept that involves nothing less than the creation of a new order: 'It is a word we use for the "messy, contested process" which involves a suite of issues – resource depletion and degradation; pollution; ecological life support services; society and the human condition'.⁷

1.2.3 Global drivers of change for sustainability

The global financial crisis has once again focused attention on the increasing interdependence of international economies. The collapse of Enron / Worldcom in the United States of America and HIH in Australia drew attention to the fact that in a globalised world economy, corporations have the capacity to act outside parameters of existing systems of oversight and supervision and that such systems do not always work effectively. In an information-based economy operating beyond national boundaries the volume of information coupled with jurisdictional issues makes government regulation increasingly difficult and potentially complex.

More often world economies need to be able to turn to systems of regulation and security that require businesses to be more open and accountable for their actions, and to provide timely and comprehensive

disclosure of matters of relevance to a wider range of stakeholders on a broader range of issues. From some viewpoints the collapse of Enron, HIH, Lehman Brothers and the global financial crisis itself could be viewed as a failure of systems of assurance and oversight, accounting, auditing and financial review. This presages not just *more regulation*, but *smarter regulation*, where the burden of providing disclosure on a broader range of topics to new audiences will be coupled with extended duties, responsibilities and liabilities of accountability and transparency.

Global initiatives for more broadly based systems of disclosure have been promoted by international partnerships and not-for-profit organisations. They include the Global Reporting Initiative (GRI)⁸, the AA1000 standards of the AccountAbility partnership⁹, the Connected Reporting Framework¹⁰, the Dow Jones Sustainability Indexes¹¹ and a range of others,



⁶ World Commission on Environment and Development, *Our Common Future (The Brundtland Report)* (1987), p. 54.

⁷ Stephen Dovers, *Environment and Sustainability Policy: Creation, Implementation, Evaluation* (2005), pp. 8-9.

⁸ See <http://www.globalreporting.org/Home>

⁹ See <http://www.accountability21.net/aa1000series>

¹⁰ See <http://www.sustainabilityatwork.org.uk/strategy/report/0>

¹¹ See <http://www.sustainability-index.com/>

1 SUSTAINABILITY IN ACCOUNTING

including triple bottom line reporting, ecological footprinting, social auditing, balanced scorecard approaches and sustainability assessment models.¹² Ratings agencies are also actively developing their own metrics for sustainability reporting and sustainability-based risk assessment.

While more than 2,500 organisations utilise some form of corporate sustainability or social responsibility accounting, the range of initiatives has led to further problems of comparison between forms of reporting that can vary in content, form and degree of credibility.¹³ And while there is still resistance to sustainability reporting, corporations – the most significant units of economic activity world wide – are increasingly conscious of developing pressures to institute such forms of accounting, either because they recognise that it may be to their long term advantage or because they perceive that such forms of accounting will become mandatory either through investor or business demand or because of government regulation.

1.2.4 Local and national drivers of change for sustainability

Australia has had to respond in anticipation of potential economic effects of environmental damage. For example, the creation of new markets for resources historically has been dependent on resources being re-valued in terms of new economic use (e.g. crude oil and uranium). However, in recent years government intervention has created both new markets and new commodities: a national electricity market to provide stability and security of energy supplies; and a new system of private ownership of water separate from land title, creating a new water market. In addition, the creation of a market for another new resource – carbon – is not far away.

These sorts of changes have become embedded in our political system through legal changes. Since the 1970s all Australian states have introduced policies, statutes, regulations and rules largely displacing the common law, which make up our federal and state environmental laws.

The influence of non-governmental organisations and international corporations that have adopted sustainable practice has also been felt. Possibly one of the most significant drivers of change for sustainability in Australia has been the attitude of the finance sector and the influence of long-term investors such as ethical investment funds and superannuation funds. While the extent of the influence of a new carbon market on matters such as sustainability reporting cannot as yet be fully appreciated – and there is reason to suggest industry may be inadequately prepared for change¹⁴ – it is likely that the financial sector will provide a leading role, requiring businesses to be better informed and prepared than is presently the case.

Within accounting, the role of the professional associations in promoting sustainable practice is strong and growing. There are reasons to think that a view that sustainable practice does not accord with clients' interests is outdated:

¹² See Jeffrey Unerman, 'Placing a Value on Sustainability' in *Papers Presented at the Accounting for Sustainability Forum*, (London, 17 December 2008).

¹³ See Brian Ballou & Dan L Heitger, 'Integrating Governance Risk and Reporting to create Long-term Value', *Strategic Finance*, May 2008, pp. 38–41.

¹⁴ Overall, recent surveys suggest a large number of corporations may be underprepared for carbon markets. Only 15% of those surveyed by the Australian Industry Group (AIG) had any detailed knowledge of the carbon pollution reduction scheme, and 30% had no knowledge whatsoever of the scheme: Emma Griffiths, 'Business in the Dark about Emissions Trading', *The World Today*: ABC Radio (20 July 2009): <http://www.abc.net.au/newsstories/2009/07/20/2631035.htm>

The Stern Report issued by the UK Government (Stern 2006) and numerous other reports and publications (e.g. Economist, 2 June 2007; Hatfield Dodds et al. 2008) attest to the growing importance of corporate environmental and social performance as determinants of future economic performance. The key question for business is how to move towards an approach where sustainability becomes an important part of the firm's business strategy, embedded in the business model and incorporated into its core products and services. According to Dunphy et al. (2007), making this shift is dependent upon the organisation developing a range of skills and capabilities so that sustainability can be incorporated as a strategic consideration into daily business decisions.¹⁵

Certainly the Financial Services Institute of Australasia (FINSIA) has been keen to publish research and academic articles to illustrate the importance of corporate social responsibility (CSR):

Though interest and expertise is developing in the Australian corporate sector, there are grounds to believe this country is not at the forefront of appreciating or realising the

benefits of CSR ... However the ground is shifting, and in a recent FINSIA survey of fellows not only did a majority agree that CSR reporting should take place on a voluntary basis, more surprisingly a small majority accepted the need for mandatory reporting.¹⁶

The two principal professional associations in Australia – CPA Australia (the CPA) and the Institute of Chartered Accountants in Australia (the Institute) have indicated their awareness of the significance of issues of sustainability reporting and development of appropriate skill sets in word and in deed. The commitment of both organisations to sustainability principles has been shown by their adoption of, and support for, sustainability-focused reporting approaches and by their opting to take up membership of the Accounting for Sustainability Forum.

The Australian media are also aware of the developing significance of sustainable practice:

Sustainable development will be one of the – if not the most – critical drivers of business over the next decade as companies realise that their survival hinges on how well they respond to environmental, social and governance (ESG) issues.¹⁷

Together with the government and non-government sector initiatives these drivers represent a considerable force for change toward sustainability.

This brief examination of the global, national and local drivers and initiatives for sustainability suggests a range of factors militate strongly in favour of integrating sustainability in professional accounting training. Further, such information as is available suggests that accounting schools within Australia may be lagging behind their counterparts overseas – in particular in comparable Organisation for Economic Cooperation and Development (OECD) nations – in terms of the introduction and embedding of sustainability content in course curricula. It is important to examine the causes for this discrepancy. It is worth noting that accounting education is also subject to highly specific global and national pressures as a result of the presence of large numbers of overseas students at Australian universities – pressures that have a significant impact on university, and indeed national, income.

¹⁵ Janelle Thomas & Suzanne Benn, *Education About and for Sustainability in Australian Business Schools: Stage 3. Report to the Australian Government Department of the Environment, Water, Heritage and the Arts*, prepared by the Australian Research Institute in Education for Sustainability (Sydney, 2009), p. 13.

¹⁶ Thomas Clarke & Alice Klettner, *Corporate Social Responsibility and Sustainability: the New Business Imperatives? An International Comparison* (2007) p. 6; and Econtech, *Tip of the Iceberg – the Economics of Sustainability Risk Reporting* (2007).

¹⁷ Sara Rich, 'Sustainability key to economic survival', *The Australian* (22 April 2009).

1 SUSTAINABILITY IN ACCOUNTING

1.2.5 Accounting education in the global context

There is little information available to provide an appropriate ranking of accounting schools in Australia on either a national or global scale – in terms of their ability to deliver education for building sustainability. ARIES's own research into Master of Business Administration (MBA) programs indicated that business schools that were leading sustainability tended to focus on education about sustainability rather than on building graduate capacities for sustainability in the workplace,¹⁸ but in discussions, experienced and concerned academics were sceptical of even that level of educational delivery being achieved within the majority of accounting schools. In the 2007–08 *Beyond Grey Pinstripes Global 100* ranking of the treatment of social and environmental issues in MBA programs, only one Australian university was listed. Two Australian MBA programs are featured in the latest (2009–10) report.¹⁹

Another finding of the ARIES *Education about and for Sustainability in Australian Business Schools* research program was that most business schools in Australia are lagging behind the discussions underway in the workplace. In terms of practical application, business, industry and government organisations at all levels were clearly major sources of expertise that could

be appropriately incorporated into strategic planning and curriculum development within the university context.²⁰ Again, our discussions with academic staff indicated that this finding was equally applicable to accounting schools.

The business schools in Stage 3 of the ARIES Business Schools research program²¹ sought to address multiple drivers to embed education about and for sustainability throughout curriculum and teaching practice, and develop the capacity of graduates to assist businesses to improve their sustainability. The active participation of corporations was an instrumental driver in Stage 3. Building 'relationships with the corporate sector to decrease the gap between current "best practice" in business and course material' was a recommendation arising from Stage 2 of the ARIES program²² and corporate involvement was found to be crucial to demonstrate the demand for sustainability to students and academic staff.

Significantly, in the course of Stage 3 of that research, participating business schools reported that the departments or schools of accounting, finance and economics had the least enthusiasm for 'mainstreaming' sustainability, and also had unique teaching and resource needs. Yet the schools of accounting and finance tend to attract the greatest student

numbers and high-fee-paying international students, and their influence on business faculty resources can extend to teaching strategies and business priorities.

*The disciplines of economics and accounting apparently had the greatest reluctance to educate about and for sustainability. In the corporatised model of modern business schools, the finance, economics and accounting faculties attract the greatest number of students and high-fee-paying students and thus have considerable power. On the whole, these students are not yet demanding sustainability education. There are also professional constraints; for example, accounting schools need professional accreditation and there is not yet an accounting standard for environmental or sustainability accounting. These disciplines also have special teaching needs such as more concise, relevant cases and resources for students who speak English as a second language. As they receive most of the resources, these disciplines can influence the priorities of the business schools.*²³

Participants also identified the importance of embedding sustainability as an explicit learning objective throughout the core and elective courses, and suggested that accreditation may be a key.

18 Thomas and Benn (above n 15) p. 14.

19 The Aspen Institute Center for Business Education, 2007, *2007–08 Beyond Grey Pinstripes Global 100: Preparing MBAs for Social and Environmental Stewardship*: http://beyondgreypinstripes.org/rankings/bgp_2007_2008.pdf (30 January 2010). In the ranking for 2007–08 one Australian school – Curtin University of Technology – and in 2009–10, two Australian schools were listed – Griffith Business School (at 27) and the University of South Australia, International Graduate School of Business (at 78) – see Aspen Institute, 2009, *2009–10 Beyond Grey Pinstripes Global 100* <http://beyondgreypinstripes.org/rankings/index.cfm> (31 January 2010). It is to be noted that schools must make application for ranking. It is not known how many Australian institutions applied for ranking in either year.

20 Thomas and Benn (above n 15) p. 14.

21 Ibid.

22 SA Hunting, J Mah & D Tilbury, *Education About and For Sustainability in Australian Business Schools: Embedding Sustainability in MBA Programs*. Report to the Australian Government Department of the Environment and Heritage, (Sydney:2006) p. 10 <http://www.aries.mq.edu.au/projects/MBA2/files/BusSchoolsBrochure2ndEd.pdf>.

23 Thomas and Benn (above n 15) p. 50.

1.2.6 Overseas students and accounting education

Overseas students represent an increasingly significant percentage of students enrolled in Australian accounting schools both here and offshore. Figures showing the number of students and a breakdown of students by region are listed in Appendix 4, Table A.

Recent CPA statistics show that 24.5% of CPA Program candidates are studying the CPA Program abroad from Australia.²⁴ The numbers of overseas students in Australian higher education institutions increased at a rate of 11% per annum between 2000 and 2005, China and India being the most significant source.²⁵ The proportion of students from East Asia and the Pacific in Australia is dramatically higher than in America and Europe (see Appendix 4, Table B).

The intake of overseas students contributes significantly to the national economy. In Australia, education services were the third largest export category earner for the year 2007–08. Australia hosts a high proportion of the world's international students – just over 207,000 (7.5%) of the 2.8 million tertiary students studying abroad in 2006.²⁶ Education, combined with health and community services, provided the fourth largest share (10%) of Australia's GDP in 2007.²⁷

Australia has the highest proportion of international university students of OECD member countries, according to the organisation's annual *Education at a Glance 2007* report.²⁸ Fee-paying overseas students now contribute more to total university income than the income derived from the Higher Education Contribution Scheme (see Appendix 4, Figure 1).

In summary, the figures show the central importance of the overseas student market, to which education in accountancy is a significant contributor, to both the national and university economy. The challenge for accounting schools can thus be perceived as one of weighing the risks associated with change to course content as more universities compete for a fixed pool of potential students. The critical questions are:

- Will the introduction of sustainability content be perceived as depriving accounting courses of relevance?
- Can the embedding of sustainability within the curriculum offer competitive advantage?

1.2.7 The structure of accounting in higher education

Accountancy involves certain core skills: definition, recognition, measurement, disclosure and assurance. That technical foundation creates the very basis of trust of, and confidence in, the advice of accountants. Accountants play an important role in our economic, legal, social and political systems in providing advice based on these essential skills. These skills could be of vital importance in informing the world on the validity and efficacy of measures taken to address environmental concerns and on progress towards implementing sustainable development.

Traditionally, however, accounting education has focussed on financial reporting, analysis and assurance. Further, there are two key misperceptions amongst many people (including some accountants): firstly, that sustainability issues relate solely to 'environmental issues' – i.e. issues associated with natural resources management outside the accustomed domain of accountants; and secondly, that sustainability relates solely to 'non-financial' accounting. In fact, while non-financial accounting plays a significant role in sustainable practice, sustainability has far wider parameters than just natural resources management, and even in that field, financial accounting can play a highly significant role.²⁹

24 CPA, Australia, 'Foreign student population in Australia almost one in five' (2002) http://www.cpaaustralia.com.au/cps/rde/xchg/SID-57FECBC958787F/cpa/hs.xsl/1017_24197_ENA_HTML.htm (13 June 2009)

25 Greg Hall & Karen Hooper, *Australia's Exports of Education Services*: Reserve Bank of Australia http://www.rba.gov.au/PublicationsAndResearch/Bulletin/bu_jun08/aus_exports_education_services.html (15 May 2009).

26 Ibid.

27 Glenn Stevens, *The Australian Economy: Then and Now – Address to the Inaugural Faculty of Economics and Business Alumni Dinner by the Governor of the Reserve Bank, The University of Sydney – 15 May 2008*: Reserve Bank of Australia http://www.rba.gov.au/Speeches/2008/sp_gov_150508.html (15 May 2009).

28 More than 17% of the campus population comes from abroad, compared to 3.4% in the student population of the USA: CPA Australia, *Submission to the Ministerial Discussion Paper: Higher Education at the Crossroads* (28 June, 2002).

29 Heal provides an excellent example of this in describing the (highly profitable) market-driven processes that led to the reforestation of the Catskill Mountains to supply New York's drinking water – see Geoffrey Heal, 'Markets and Sustainability', in R Revesz, P Sands, and R Stewart (eds), *Environmental Law, the Economy and Sustainable Development* (2000).

1 SUSTAINABILITY IN ACCOUNTING

It must be noted that schools of accounting and business, attracting as they do a large number of full fee paying students, are better equipped than most disciplines to adjust curricula to meet demand. Their stronger financial footing provides a large measure of flexibility in terms of attracting qualified staff and developing resources if that can be justified by reference to appropriate demand. This suggests that, of the categories of factors that operate as impediments to mainstreaming sustainability in accounting education, the most significant factor may well be the subjective perception of the relevance of sustainability to the practice of accountancy. In short, if those perceptions are changed, then demand will alter to provide justification for course change and the acquisition of appropriate human and physical resources appropriate to incorporation of sustainability subject matter.

There is a long history of attempts to introduce more material on sustainability issues into accounting curricula.³⁰ Extensive literature on educational aspects of accounting education was published in the 1990s,³¹ and many of the needs and drivers in regard to accounting skills were recognised in the mid-1970s.³² Significant problems in regard to accounting education were identified in the United States of America, but the attention of the profession there was drawn to a general shortage of accountants.³³

The work of the universities involved in the Accounting for the Future Report provides a useful bibliography of the recent literature on the topic.³⁴ Some of their findings are not entirely complimentary of accounting education:

In spite of many initiatives to improve graduate employability skills of accountants in Australia, the development of these skills has remained as problematic as in other disciplines (Green, Hammer & Star 2009, Star & Hammer 2007) ... in an unpredictable and intensely competitive global market, where new entrants to the profession find that the role of the accountant has expanded beyond narrow disciplinary knowledge to include, for example, strategic management, and risk and change management (Parker 2001, Jones & Abraham 2007) ... accountants require an ever broadening range of personal and interpersonal attributes or skills, including adaptability (Harvey 1999, p.7), proactivity (Howieson 2003), and expert communication and people-management skills.³⁵

30 Bebbington's lengthy literature review in 1997 references Galbraith's *New Industrial State* in 1972 as a starting point – see Jan Bebbington, 'Engagement, Education and Sustainability: A Review Essay on Environmental Accounting' (1997) 10(3) *Accounting, Auditing & Accountability Journal* 365-81. In the same year, Mathews spoke of 25 years of social and environmental accounting: MR Mathews, 'Twenty-five years of Social and Environmental Accounting Research. Is there a Silver Jubilee to Celebrate?' (1997) 10(4) *Accounting, Auditing & Accountability Journal* 481-531. Four years later Gray described 30 years of social accounting: Rob Gray, 'Thirty years of Social Accounting, Reporting and Auditing: What (if anything) Have we Learnt?' (2001) 10(1) *Business Ethics: A European Review* 9-15.

31 Matthews (1997) (above n30); Phil Macnaghten & Michael Jacobs, 'Public Identification with Sustainable Development: Investigating Cultural Barriers to Participation' (1997) 7(1) *Global Environmental Change* 5-24; Markus J Milne, 'On Sustainability; the Environment and Management Accounting' (1996) 7 *Management Accounting Research* 135-61; Hugh Willmott, Tony Puxty & Prem Sikka, 'Commentary: Losing One's Reason: On the Integrity of Accounting Academics' (1993) 6(2) *Accounting, Auditing and Accountability Journal* 98-110; Rob Gray, Diane Walters, Jan Bebbington & Ian Thompson, 'The Greening of Enterprise: An Exploration of the (Non) Role of Environmental Accounting and Environmental Accountants in Organizational Change' (1995) 6 *Critical Perspectives on Accounting* 211-39.

32 See Areih A Ullmann, 'The Corporate Environmental Accounting System: A Management Tool for Fighting Environmental Degradation' (1976) 1(1) *Accounting, Organizations and Society* 71-79.

33 See the *Bedford Committee Report: Norton Bedford, EE Bartholomew, Charles A Bowsher, Abbott L Brown, Sidney Davidson, Charles T Horngren, Herbert C Knortz, M Mendel Piser, William G Shenkir, John K Simmons, Edward L Summers & John T Wheeler*, 'Future Accounting Education: Preparing for the Expanding Profession – The American Accounting Association Committee on the Future Structure, Content and Scope of Accounting Education' (1986) 1(1) *Issues in Accounting Education* 168-95. Similar concerns about a future shortage of accountants have been expressed here – see Bob Birrell, *The Changing Face of the Accounting Profession in Australia*, Report to CPA Australia, (Melbourne:2006); Institute of Chartered Accountants in Australia, *Broader Entry into the Chartered Accountants Program*: <http://www.charteredaccountants.com.au/A117235857> (24 July 2009); Milanda Rout, 'Free Degrees to Lure Accountants' (2007) *The Australian*, <http://www.theaustralian.news.com.au/story/0,25197,2212916412332,00.html> (25 July 2009).

34 Phil Hancock, Bryan Howieson, Marie Kavanagh, Jenny Kent, Irene Tempone & Naomi Segal, *Accounting for the Future: More than Numbers: A Collaborative Investigation into the Changing Skill set for Professional Accounting Graduates over the next ten years and Strategies for Embedding such skills into Professional Accounting Programs Report to Australian Learning and Teaching Council, an initiative of the Australian Government Department of Education, Employment and Workplace Relations*, (Strawberry Hills:2009). See also the identically sponsored report of Mark Freeman, Phil Hancock, Lyn Simpson, Chris Sykes, Peter Petocz, Iain Densten & Kathy Gibson, *Business as Usual: A Collaborative and Inclusive Investigation of Existing Resources, Strengths, Gaps and Challenges to be Addressed for Sustainability in Teaching and Learning in Australian University Business Faculties*, Report to The Carrick Institute for Learning and Teaching in Higher Education Ltd, an initiative of the Australian Government Department of Education, Employment and Workplace Relations, (Sydney:2008) and Phil Hancock, 'Accounting Skills for Future Graduates in Australia: More than Numbers' in *Papers Presented at the University of South Australia Seminar Series*, (Adelaide, 3 July 2009).

35 Hancock et al (above n34) p. 14.

A recent report published by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) notes, in relation to 'green jobs':

... what little data there are is concentrated on jobs in renewable energy, and the trades ... there is little about transport, agriculture, innovation and/or research and development, and green accounting/standards, which are also areas of potential employment change and perhaps growth.³⁶

In short, this literature suggests that not only are efforts at incorporating relevant skills falling short, but also that there is a shortage of requisite skills and a lack of awareness of the need and future demand for those skills.

In the early 1990s in Australia concerns were expressed at a number of different policy levels and by industry groups about the ability of the education system to equip students with vocational competencies needed for a fast-changing world.³⁷ In 1992, the Mayer Committee – commissioned by the Australian Education Council and Ministers of Vocational Education,

Employment and Training – reported on the nature of these 'key competencies' essential to preparation for employment yet suitably generic to a range of work situations. The committee was of the view that rather than being occupation- or industry-specific, such competencies should equip individuals to participate effectively in a wide range of social settings. Equally the key competencies had to involve the application of readily learned knowledge and skills which would be amenable to credible assessment.³⁸

The Mayer Committee defined seven key competencies for participation in the emerging forms of work and work organisation as:

- collecting, analysing and organising information
- communicating ideas and information
- planning and organising activities
- working with others and in teams
- using mathematical ideas and techniques
- solving problems
- using technology.³⁹

Throughout Australia in the 1990s efforts were made to implement the Mayer key competencies in schools. In 1999 the *Adelaide Declaration on National Goals for Schooling in the Twenty-First Century* incorporated all the Mayer key competencies directly. In the higher education sector, since the publication of the Mayer Committee Report, most universities have articulated sets of desirable graduate attributes, and best practice examples for developing generic skills among university students have been widely reported.⁴⁰ Accordingly, such research as has been done in regard to accounting education in Australia has an understandable focus on what has been described in this report as 'soft skills' (see 1.2.8 below).

“ ... there is a shortage of requisite skills and a lack of awareness of the need and future demand for those skills. ”

36 Steve Hatfield-Dodds, Graham Turner, Heinz Schandl & Tanjua Doss, *Growing the Green Collar Economy: Skills and Labour Challenges in Reducing our Greenhouse Emissions and National Environmental Footprint, Report to Dusseldorp Skills Forum*, (CSIRO Sustainable Ecosystems, Canberra:2008) p. 18.

37 There had been reviews of vocational education in 1985 (the Karmel Committee) and 1991 (Australian Education Council Review Committee – known as the Finn Review). The Mayer Committee report was developed following the recommendations of the Finn Review. In 1999 the Australian Industry Group commissioned Allen Consulting Group to prepare a report that drew attention to the importance of both 'hard' and 'soft' skills which were seen as prerequisites that should be developed prior to recruitment and in 2002 the Australian Chamber of Commerce and Industry and the Business Council of Australia undertook a study of employers' views on generic skills. See generally, National Centre for Vocational Education Research Ltd, *Defining Generic Skills: At a Glance* (2003) which also describes the extensive work carried out on the topic in the vocational education and training (VET) sector.

38 Australian Education Council – Mayer Committee, *Key Competencies. Report of the Committee to Advise the Australian Education Council and Ministers of Vocational Education, Employment and Training on Employment-related Key Competencies for Postcompulsory Education and Training* (1992) p. 12.

39 Ibid., p. 5.

40 See Ashley Goldsworthy, 'Developing Generic Skills: Examples of Best Practice', *B-HERT News*, Issue 16 – April, 2003 and 13 contributions appearing in that issue.

1 SUSTAINABILITY IN ACCOUNTING

TABLE 1: PREFERRED TERMS BY COUNTRY, FOR NON-TECHNICAL SKILLS⁴³

Country	Term used to describe non-technical skills
Australia	Key competencies, employability skills, generic skills, non-technical skills, professional skills
Canada	Employability skills
Denmark	Process independent qualifications
France	Transferable skills
Germany	Key qualifications
New Zealand	Essential skills
Singapore	Critical enabling skills
Switzerland	Trans-disciplinary skills
United Kingdom	Core skills, Key skills, common skills, personal skills
United States	Basic skills, necessary skills, workplace know-how, transferable skills, fundamental skills

1.2.8 The importance of 'soft skills'

Academic literature as early as the 1970s recognised the need for graduates to develop 'soft skills' and the importance of integrating a critical approach to accounting education.⁴¹ It has been said that the problems associated with integration of sustainability subject matter still commence with the 'messy' nature of sustainability – issues of complexity, uncertainty and risk that are clouded by the contestable and readily politicised nature of the subject matter.⁴² The problems associated with implementing sustainability are

likely to be similar to the problems of implementing 'soft skills'.

The role of 'soft skills' in accounting education has received recognition world-wide. As Hancock et al demonstrate, the description of similar sets of skills varies from country to country.

In the Australian context, the overlap between 'soft skills', however described, and the 'key competencies' described by the Mayer Committee is apparent. Accordingly it is appropriate to consider recent critiques of efforts by universities to implement the recommendations of the Mayer Committee.

Pitman and Broomhall offer these pertinent observations:

On the one hand, there are deep reservations about the purpose and suitability of submitting generic skills that institutions impart to their students to a standardised metric assessment. Widespread in the sector is the terminology of graduate attributes and a tendency to articulate abstract concepts, such as ethics and environmental awareness, more than objective skills like literacy and numeracy. University mission statements and learning theory texts have particularly highlighted the

⁴¹ See Ullman (above n32), various references included in Bebbington's review (above n30) and more recently: Gordon Boyce, Sarah Williams, Andrea Kelly & Helen Yee, 'Fostering Deep and Elaborative Learning and Generic (soft) Skill Development: the Strategic use of Case Studies in Accounting Education' (2001) 10(1) *Accounting Education* 37-60; Irene M Gordon, 'Commentary on: Some Thoughts on Social and Environmental Accounting Education' (2001) 10(4) *Accounting Education* 361-64; MR Mathews, 'The Way Forward for Accounting Education? A Comment on Albrecht and Sack "A Perilous Future"' (2001) 10(1) *Accounting Education* 117-22; Rob Gray & David Collison, 'Can't see the wood for the trees, Can't see the trees for the numbers? Accounting Education, Sustainability and the Public Interest' (2002) 13 *Critical Perspectives on Accounting*, 797-836; Kala Saravanamuthu & Tony Tinker, 'The University in the New Corporate World' (2002) 13 *Critical Perspectives on Accounting* 545-54; Bryan Howieson, 'Accounting Practice in the new Millennium: Is Accounting Education Ready to meet the Challenge?' (2003) 35 *The British Accounting Review* 69-103; Martin Bennett, Jan Jaap Bouma & Elena Ciccozzi, 'An Institutional Perspective on the Transfer of Accounting Knowledge: a Case Study' (2004) 13(3) *Accounting Education* 329-46; Gordon Boyce, 'Critical Accounting Education: Teaching and Learning Outside the Circle' (2004) 15 *Critical Perspectives on Accounting* 565-86.

⁴² Gray and Collison, (above n41).

⁴³ Hancock et al (above n34) Table 3.2 at p. 28 based on National Centre for Vocational Education Research Ltd Defining Generic Skills: at a Glance (2003) Box 1 at p. 2, with additions.

social and community, as well as economic, benefits of the lifelong learning they enable. The qualities of the sector's 'attributes' are generally much harder to isolate and measure than those skill sets that government has identified and proposed for assessment. Higher education has thus located itself as an important part of the lifelong learning agenda of recent years, on terms that support the current social presentation of universities and preserve the financial health of the entire sector.

...

The academy is managing environmental pressures, a range of organisational goals and institutionalised professional norms. At stake is a critical question that is being continually negotiated: how best should universities integrate lifelong learning? It forms an important part of the sector's sense of their social and community responsibilities, as well as a key business strategy for many institutions in an increasingly competitive market. Yet, at the same time, its acceptance must not undermine universities' status as providers of unique disciplinary expertise and a superior set of moral and ethical qualities and transferable generic attributes in its graduates ... the next

decade may prove crucial in enabling us to determine just how fundamental the recent articulation of lifelong learning engagement has been to the social mission, or simply to the financial exigencies, of the contemporary academy.⁴⁴

It might be noted, however, that if the 1990s ended with universities appearing to endorse and willingly attempt to implement recommendations such as those of the Mayer Committee, the end of the first decade of the 21st century evidences in many disciplines a concern about the lack of definitional particularity of 'graduate attributes' and how these might be translated into practical approaches relevant to their discipline.

In 2008, Blazey et al expressed the view that descriptions of generic skills were similar across the literature.⁴⁵ Accordingly they adopted definitions for generic skills for Business Law from three appropriate public websites, each web document created in 2006. In mid-2009, none of those specific web entries were maintained and indeed, it was difficult to locate references to 'generic skills' (at least by that term) through those websites. Blazey et al were not wrong to use those sources, and this observation is not intended to suggest that the organisations concerned are in any way less supportive of the need for such skills. Rather it suggests that

there is still a substantial degree of uncertainty about how these skills should be described, and the practicality of defining and measuring skills that relate to 'lifetime learning' in a way that encompasses different disciplines. Table 2 summarises three approaches to describing soft skills.

This table demonstrates a degree of accord on the general nature of desirable 'soft skills', yet differences in terminology render it difficult to establish where the parties agree and where they might part company. Importantly, the differences suggest better communication between the parties is required.

“ The role of 'soft skills' in accounting education has received recognition world-wide. ”

⁴⁴ Tim Pitman & Susan Broomhall, 'Australian Universities, Generic skills and Lifelong Learning' (2009) 28(4) *International Journal of Lifelong Learning* 439-58, pp. 454-55.

⁴⁵ Patricia Blazey, Hope Ashiabor & Penelope Janu, 'Stakeholder Expectations for Generic Skills in Accounting Graduates: Curriculum Mapping and Implications for Change' (2008) Macquarie Law Working Paper 2008/13, <http://ssrn.com/abstract=1123784> (14 July 2009) at p.2.

1 SUSTAINABILITY IN ACCOUNTING

TABLE 2: THREE APPROACHES TO DEFINING 'SOFT' SKILLS⁴⁶

University Research [reporting employer expectations in order of priority]	Professional Associations	ACCI/BCA 2002
NON-TECHNICAL SKILLS <ol style="list-style-type: none"> 1. Communication, presentation Verbal and written – speaking, listening, negotiation and feedback, written communication and reports. 2. Teamwork, good interpersonal skills Compatibility with the organisation's ethos. 3. Self-management Well-rounded, mature, confident persons, hard working, dedicated and holistic, flexible and able to deal with complexity, uncertainty and pressure. 4. Initiative and enterprise Business acumen, knowledge, planning, and building, vision, imagination, seeing the big picture, and adding value. 5. Problem solving The ability to apply theory to practice as well as critical analysis and thinking skills, the ability to relate concepts learned at university to new situations in the workplace, the ability to think for oneself, the ability to regard critically new information and situations. 6. Planning and organising The ability to plan and organise as well as time and project management skills. 	NON-TECHNICAL SKILLS <ol style="list-style-type: none"> 1. Business skills Financial modelling, regulatory environment, business analysis, customer focus, project management, technology, business context & commercial acumen, business development and management skills. 2. Leadership skills Managing people, change management, strategy, innovation, influencing, planning, social responsibility, global perspectives and diversity. 3. Personal effectiveness skills Results, self-awareness, quality assurance, ethical behaviour, critical analysis & professional judgement, problem solving & decision making, interpersonal skills, communications and teamwork. 	NON-TECHNICAL SKILLS <ol style="list-style-type: none"> 1. Communication skills that contribute to productive and harmonious relations between employees and customers. 2. Teamwork skills that contribute to productive working relationships and outcomes. 3. Self-management skills that contribute to employee satisfaction and growth. 4. Initiative and enterprise skills that contribute to innovative outcomes. 5. Problem-solving skills that contribute to productive outcomes. 6. Planning and organising skills that contribute to long-term and short-term strategic Planning. 7. Learning skills that contribute to ongoing improvement and expansion in employee and company operations and outcomes.
TECHNICAL SKILLS <ol style="list-style-type: none"> 1. Audit 2. Entries, debits & credits 3. Tax 4. Financial reporting 	TECHNICAL SKILLS <ol style="list-style-type: none"> 1. Audit & assurance 2. Management accounting 3. Tax 4. Financial accounting 5. Financial planning 6. Forensic accounting 7. Insolvency 8. Corporate governance 9. Finance/financial risk management 	TECHNICAL SKILLS Technology skills that contribute to effective execution of tasks.

⁴⁶ The column headed 'University Research' is summarised from Hancock et al (above n34) pp. 35-55; that headed 'Professional Associations' is taken from personal communication to the authors from one professional association, in circumstances indicating there was substantial accord within the organisations concerned. The column headed 'ACCI/BCA' is taken from the Australian Chamber of Commerce and the Industry & Business Council of Australia, *Employability Skills for the Future* (2002) p. 58. The lists have been ordered to indicate parallels with each other.

1.2.9 Research on stakeholder attitudes

The perceptions of various stakeholders about the inclusion of soft skills in general, and sustainability in particular, are therefore relevant to the inclusion of sustainability in accounting in higher education. The views of accounting graduates and employees are difficult to ascertain without detailed and expensive research, except as their collective views are reflected through their professional associations. The views of academics on key issues can be said to be reflected in literature, which often includes surveys of, or consultation and interviews with, practitioners.

Recent work by Blazey et al⁴⁷ and Hancock et al⁴⁸ has filled a gap in information about the attitudes of Australian students, graduates, professional associations and those

who recruit accounting graduates. The information that can be gleaned from this research concerning stakeholder attitudes is considered against the background provided by research and reports over time in the United States and the United Kingdom.

In 2000, reviews of progress in implementation of reform in accounting education were presented by Albrecht and Sack⁴⁹ and supported by quantitative assessments of the views of academics, students and graduates.

Albrecht and Sack drew attention to three principal drivers of change, broadly speaking: technology, globalisation and the shifting of market influence in favour of long term investor groups. Regarding professional education their views were highly pertinent for our purposes:

It is probably harder for education to change than it is for any of the other groups. As one interviewee said, 'Business has to be more nimble [than education]. It is shaped quickly by market forces. Higher education is not so nimble – it's only slowly shaped by market forces.' Accounting education is burdened by the hierarchy within universities. Before curricula changes can be made, approval must often be given by departmental and college curriculum committees, university administrators, and even boards of regents.⁵⁰

Perhaps the most alarming aspect of the findings of Albrecht and Sack was that although nearly 100% of accounting educators and 79% of accounting practitioners who responded to their surveys had undergraduate degrees in accounting, most of them stated

47 Above n45.

48 Above n34.

49 W Steve Albrecht & Robert J Sack, *Accounting Education: Charting the Course through a Perilous Future* (2000).

50 Ibid., p. 13.



1 SUSTAINABILITY IN ACCOUNTING

that they would not seek an accounting degree if completing their education over again. The principal explanation offered was that while the business world had changed dramatically, accounting education had not. Accounting education was perceived as being too narrow and backward-looking and too costly for the benefits received. The secondary reason offered referred to the three drivers of change referred to above.⁵¹

This report recommended dramatic changes. In particular:

- establishing a combination degree program with a related discipline
 - developing an accounting/ systems degree
- or
- developing an accounting/ finance degree⁵².

In the UK context, Gray and Collison found that *practitioners, opinion leaders and professional bodies* saw accounting as a client-oriented activity and the effect on a client was to be considered the principal determinant of interest – in environment as in anything else. Environmental issues were perceived as marginal, though increasing in significance. Sustainability was not widely understood or recognised. This group questioned the need to prioritise the environment.

The majority of undergraduate *students* indicated that perceived career relevance was vital in their choice of courses, and the environment was not seen as career relevant or especially interesting. Their personal views of what constitutes accounting were quite important.

Gray and Collison found that *non-accounting academics* (unless deep green by belief) saw environmental issues as marginal and probably adequately covered in specialised courses. *Accounting academics* saw no major impediments to introducing environmental issues, and recognised that the environment had grown in importance but was not seen as crucial. They perceived sustainability education as requiring substantial innovation and preferred more simplicity in terms of educational delivery. Both sets of academics also questioned the need to prioritise the environment.

Recruiters (employers or placement agencies) they found, rarely saw value in degrees at all, were indifferent on environmental issues and saw social skills as more important than accounting skills. They favoured 'critical thinking' and broad education.⁵³

51 Ibid., pp. 32, 35, 39.

52 Ibid., p. 62

53 Gray and Collison (above n41) p. 802.

“ ... while the business world had changed dramatically, accounting education had not. ”



The work of Blazey et al in 2008 involved a study of the 'generic skills' needed by new accounting graduates from the Department of Business Law at Macquarie University – utilising the key competencies defined in the Mayer report as a starting point but considering factors particular to accounting and law as described in a number of other sources. 'New graduates' were defined as those working in an accounting-related position in the first or second year of their career. The study focussed on the five stakeholder groups described above.⁵⁴ They found that:

Overall, intellectual, communication and interpersonal skills were the generic skills that all stakeholder groups considered are most highly valued by employers. Expectations for generic skills in new graduates were highest among representatives from

professional associations and, perhaps expressing the reality of the workplace, lowest for employers. New graduates appear to be unaware of the development of generic skills in their business law studies, although they have a high confidence level in their own abilities in this regard, and, similarly, students give the development of most generic skills in core business law units a poor rating. Academics need to better inform students about generic skills in the core units, such as analysing issues and arguing effectively, to eliminate this lack of understanding on the part of students and graduates. There is a need for a curriculum change whereby the development of generic skills is given a higher profile within traditionally heavily content based business law

units. Students also need to take responsibility for developing their own generic skills and not be totally reliant on the teaching and learning activities aimed at developing such skills within the business law core units.

There are a number of additional practical challenges that need to be addressed ... large enrolment numbers ... make it difficult to allocate sufficient resources for teaching initiatives ... Lack of communication between stakeholder groups, as reflected in their varying expectations and experiences in regard to generic skills also needs to be addressed so that all parties can reinforce the goal of producing accounting graduates with the necessary skills for the global workplace.⁵⁵

⁵⁴ Blazey et al (above n45) pp. 1, 3, 4. As stated above, Blazey et al use the term 'employers of graduates' which for the purposes of this report might be taken as synonymous with the term 'recruiters' used by Gray and Collison (above n41).

⁵⁵ Blazey et al (above n45), p. 11.



1 SUSTAINABILITY IN ACCOUNTING

Recent studies in Australia also suggest more should be done to explain the significance of sustainability education to accounting students:

Tertiary students need opportunities to explore the relevance of concepts such as sustainability to their proposed field of professional practice ... to recognise the importance of their role as graduates in empowering their clients with knowledge and skills to address local problems which threaten future wellbeing ... To meet the challenges such tasks present, strategies to develop self-efficacy and advocacy skills in students need to be developed and tested ... the curriculum should include experiences which lead to a greater awareness of social and moral responsibilities.⁵⁶

The publication of *Accounting for the Future: More than Numbers*⁵⁷ in August 2009 has provided the most comprehensive review of stakeholder views in regard to accounting education seen in Australia in recent times. Without in any way seeking to detract from the importance of the comprehensive and detailed analysis of that report, some of its most significant findings for our present purposes can be gleaned from two key tables reproduced below as Tables 3 and 4.

“ ... the curriculum should include experiences which lead to a greater awareness of social and moral responsibilities. ”

⁵⁶ Anne Sibbel, 'Pathways towards Sustainability through Higher Education' (2009) 10(1) *International Journal of Sustainability in Higher Education* 68-82.
See also James Hazelton & Matthew Haigh, 'Incorporating Sustainability into Accounting Curricula: Lessons Learnt From an Action Research Study' (2008) *Accounting Education* DOI: 10.1080/09639280802044451.

⁵⁷ Hancock et al (above n34).



TABLE 3: FREQUENCY OF COMMENTS ABOUT STAKEHOLDERS' EVALUATIONS OF NON-TECHNICAL SKILLS⁵⁸

	Desirable	Satisfactory	Inadequate	Limitations	Total
Communication, presentation	10	7	9	8	34
Initiative and enterprise	5	2	1	1	9
Planning and organisation	0	1	2	2	5
Problem solving	5	3	6	7	21
Self-management	8	6	1	3	18
Teamwork, good interpersonal skills, fit organisation ethos	9	7	1	5	22
Technological competence	0	4	0	1	5

The stakeholders described included professional accounting bodies, accounting firms, large and small employers in the public and private sectors, university accounting faculty, current students and recent graduates.⁵⁹ For present purposes, the term 'non-technical skills' can be taken to equate with what have been termed 'soft skills' elsewhere in the literature.

TABLE 4: FREQUENCY OF COMMENTS ABOUT NON-TECHNICAL SKILLS IN THE RECRUITMENT PROCESS⁶⁰

	Recruits	Recruitment processes	Ongoing employment	Total
Communication, presentation	5	16	3	24
Initiative and enterprise	2	7	1	10
Planning and organisation	1	2	0	3
Problem solving	1	7	1	9
Self-management	9	17	6	32
Teamwork, good interpersonal skills, fit organisation ethos	8	12	4	24
Technological competence	1	0	2	3

58 Ibid., Table 5.13, p. 45.

59 Ibid., p. 30.

60 Ibid., Table 5.14, p. 46.

1 SUSTAINABILITY IN ACCOUNTING

From these and other findings reproduced in the report the authors note:

Common themes that emerged across the country were:

1. *The technical skills required of graduates were essentially basic accounting skills, like debits and credits, although this varied by size of employers.*
2. *Non-technical skills were deemed to be very important in accounting graduates, particularly by employers in large organisations; communication, teamwork and self-management were regarded as the most desirable.*
3. *Graduates' skills deemed by stakeholders to be the most inadequate were communication and problem solving; their deficiency was also seen to be the most restricting to graduates in their career development.⁶¹*

In recruitment, non-technical skills were used as a discriminator when evaluating graduates with similar grades.⁶² Importantly, the report found that stakeholders were strongly of the view that responsibility for developing these skills in graduates lay with the universities.⁶³ The report identified and described a representative list of 18 strategies for improving and assessing the delivery of non-technical skills.

1.2.10 Summary of barriers and drivers

There are a number of drivers for change toward sustainability that can be identified:

- national and state policies promoting sustainable industry
- industry-level drivers for corporate social responsibility
- support for change from professional associations in accountancy
- media awareness of sustainability issues
- global accreditation in the profession recognising sustainability as an important element.

Despite these drivers, limited inclusion of sustainability in accounting has been achieved. Likely barriers are:

- lack of knowledge about how to direct established content toward sustainability outcomes
- impacts of student demand for established forms of accountancy accreditation
- absence of accreditation criteria that would enable 'soft skills' relevant to sustainability to be given priority in higher education courses.

It is speculated here that the impact of students may be related to perceptions of what the clientele demand rather than the actuality of that demand. If these perceptions can be clarified and investigated accounting schools may be in a position to respond rapidly to drivers for change toward sustainability.

To understand the nature and origins of these perceptions it is appropriate then to explore what is known of the attitudes of key stakeholders in accounting education and the means by which they exert their influence. This report aims to answer those questions within the limits of presently available data.

“ In recruitment, non-technical skills were used as a discriminator when evaluating graduates with similar grades. ”

⁶¹ Ibid., p. 5.

⁶² Ibid., p. 46 .

⁶³ Ibid., Table 5.15, p. 48.

1.3 Key research issues

This brief overview serves to highlight some of the key challenges in seeking to embed sustainability into the accounting profession. Given the drivers and initiatives in favour of such change, it is important to identify impediments to change impacting on accounting schools. The overarching research question for this program was:

What are the drivers and barriers to progressing the integration of sustainability into the accounting profession?

The characterisation of impediments to change can be problematic, as many factors must be considered. For example:

- Is the problem associated with explaining the relevance of sustainability within the framework of 'traditional' accounting skills?
- Is it a problem of overburdening students with additional subject matter?
- Does competition for student enrolments inhibit change?
- Are there institutional barriers to change?

These sorts of questions indicate a broad field of investigation. In preliminary discussions with academic staff it was suggested that in addition to problems of perceptions of sustainability there were real concerns about the lack of resources (e.g. a specific text), a shortage of qualified staff and a minimum of flexibility in course content which was compounded by a perceived absence of demand from students. In short, it was suggested that all of these factors – problems of communication and resources and institutional and economic factors – acted as combined impediments to change.

Two significant questions influence the determination of the appropriate role of accountants in contributing to this vast project to create a 'new order' of sustainability:

- Given the complex, inter-connected and uncertain nature of the broad subject matter of sustainability, how can one define, recognise, measure, disclose and give assurance in regard to accounting for sustainability?⁶⁴
- Accountants act within a framework of law and legality, but laws aimed at addressing environmental issues provide

novel frameworks for compliance involving new duties, responsibilities, obligations, and systems of reporting, sometimes within new markets, trading in new commodities, with novel control mechanisms, regulatory tribunals and administrative structures that are subject to change or reordering. Given the already burdensome task accountants face to keep up with changes how can they develop their skills to meet even more new challenges?⁶⁵

The answers to these questions must be provided in practical form. The fundamental core of the professionalism of accountants is, and remains, the ability to define, recognise, measure, disclose and give assurance. What is needed is not a change to those core skills, but an approach to utilising those skills in a world that more often than not will require accountants and other professionals to anticipate the nature and direction of change. Further, it is critical that business in general develop a better understanding of the role accountants can and should play in reporting on sustainability issues. The accountancy profession can, through appropriate advocacy, assist in this process.

“ It is critical that business in general develop a better understanding of the role accountants can and should play in reporting on sustainability issues. ”

⁶⁴ See Robert Costanza & Bernard C Patten, 'Commentary – Defining and Predicting Sustainability' (1995) 15(3) *Ecological Economics* pp. 193-6.

⁶⁵ The CPA's *Handbook* – John Ngiam & Mark Shying (eds), *Accounting Handbook* (2009) – published to update accountants on changes to basic standards and interpretations issued by the Australian Accounting Standards Board, runs to 1458 pages. Annual practice updates in relation to taxation are at least comparable in size.



2 ABOUT THE PROGRAM

This report provides the outcomes and recommendations emerging from an action research program which aimed to identify means and support efforts to foster change for sustainability within the accounting profession. This was a highly ambitious task, focussed as it was on an entire profession rather than just the educational institutions that provide professional accreditation. It is a task that could not be accomplished through the agency of a single body, but required a high degree of cooperation and coordination between a range of professional associations and academic institutions, and cooperation and consultation with business, industry, finance and government groups.

The development of the program is described in this chapter. It is best understood firstly by an examination of the action research approach in general, then by consideration of the background afforded by the ARIES research in regard to business schools, and finally by an explanation of the course adopted to suit the unique situation of the accounting profession. The complex

nature of this program meant that careful consideration of the methodology to be employed was needed. A primary consideration was to determine processes that might allow for identification of key stakeholders and for appropriate means to provide for their input – i.e. the operation of action research at a level that transcended educational institutions.

In the period of enquiry attention was drawn to a number of research projects – particularly those funded by the Australian Government Department of Education, Employment and Workplace Relations through the Australian Learning and Teaching Council (ALTC). The associated reports compensate for the notable lack of basic data about progress with implementation of sustainability principles in accounting. The findings of these ALTC projects proved invaluable in formulating the approach adopted in this program. The program was also informed by, and sought to build on, ARIES's work in regard to the related area of sustainability in business schools.

2.1 Action research and education for sustainability

Sustainability requires an ongoing process of learning⁶⁶ which supports adaptive governance and leadership for sustainability thinking in organisations. Central to the ARIES model for learning-based change are:

- envisioning alternative futures
- participation and partnership
- critically reflective thinking
- systemic practice
- iterative learning through social interactions.

Critical thinking and systemic practice helps a group of people to better understand and make sense of a complex issue and the world around it so that they can act more effectively. An action learning methodology provides a basis for continual learning and adaptive management to respond more effectively to emerging issues of sustainability.



2

Action researchers undertake action and research simultaneously to address a problem. Using this approach, project leaders and their participants initiate changes, then observe the situation and gather data to assess if the change efforts are improving the situation. This supports more effective practice by building in feedback loops, faster signals, evidence, reflection and learning that allows change practitioners to revise their plans and activities in line with the impacts.

This approach to embedding systemic change generates both learnings and tangible outcomes that extend beyond the immediate participants and the project. Bringing participants together provides a valuable platform for dialogue, sharing and stimulating sustainability practice, and presents further opportunities for sustainability leadership to emerge.

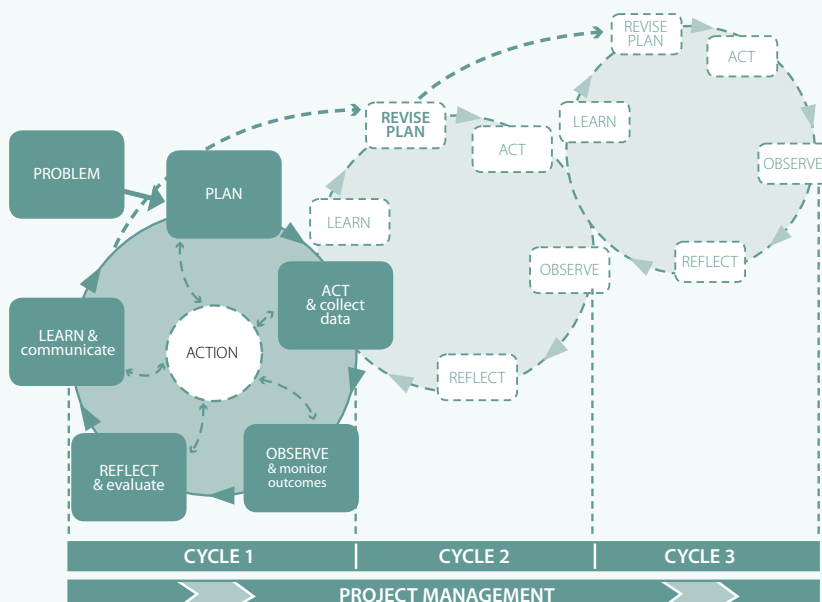
2.2 Action research and iterative learning

The ARIES model of action research cycles (Figure 2) illustrates the operation of such a research program:

Figure 2 represents the action research phases (plan, act, observe, reflect, then learn and communicate) through the iterative cycles of an ARIES action research program. The figure also features elements of continuous monitoring and evaluation (plan, collect data, monitor activities and associated outcomes, evaluate and communicate).

There are variations in how this process can be interpreted and applied in particular projects. However, common to most action research projects is an **early recognition of a problem or an issue of concern**. Drawing on facilitative processes, an action research program frequently commences with initial reflection and dialogue about the current situation, involving joint identification of the issue that the participants hold in common. Envisioning an alternative future at the outset assists project participants to break out of business-as-usual habitual patterns

FIGURE 2: ARIES ACTION RESEARCH CYCLES



2 ABOUT THE PROGRAM

of thinking and avoid projecting from the current situation, and facilitates the process of planning, acting, observing, reflecting, learning and revising.

2.3 Action research and the accounting profession

In considering application of these principles to education of professional accountants, preliminary enquiries (via pilot interviews and literature review) led to an appreciation that, while the need for embedding sustainability in the education of accountants was well recognised, there was a wide diversity of opinion about what were the critical impediments to implementation. The most basic of enquiries was sufficient to establish that **early recognition and agreement on key issues of concern was lacking**. If an action learning approach was to be effective, it would need to commence by fostering a dialogue that would lead to a degree of commonality in approach to identification of key issues.

As a consequence this program had two phases. The first involved scoping of the scale of the problems in integration of sustainability into accounting as a key profession. In this phase the literature was reviewed and preliminary contacts with key stakeholders were made. The research questions were refined and action to be initiated was determined. The second phase involved implementation of the agreed actions and a critical reflection on this process.

2.4 Phase 1

2.4.1 Selection of key stakeholders

An important starting point for this research involved establishing the stakeholders in accounting education. Emerging from the academic literature, five categories of stakeholder groups commend themselves as appropriate to consider:

- **Professional accounting associations** – apply accreditation guidelines for accounting courses in Australian universities.
- **Students** – have specific expectations and needs.
- **Academic staff** – have the responsibility of exposing students to a range of skills and providing a variety of learning experiences.
- **Recruiters of graduates** – have expectations of their graduate employees.
- **Graduates** – have formed opinions on skills valued in the workplace.⁶⁷

To chart a course for action research, consideration had to be given to the **multi-stakeholder** nature of the client base and the **multiple interests** of the stakeholders, given the **multiple roles** that accountants can play. Accountants' clients can include the smallest one person, part-time business and the largest multinational corporations; the smallest non-profit local volunteer group and the largest of international not-for-profits; and the offices of local government,

semi-government bodies, major government departments, and state-owned corporations. The roles of accountants can include minor activity little removed from basic book-keeping to the provision of significant tax or financial advice, auditing, actuarial and other forms of risk assessment, commercial, policy and regulatory advice.

For the purposes of this research it was important to 'fine down' categories of stakeholders in terms of how they influence accounting education, since all of these variables called for future accounting professionals to adjust to an extremely wide scope of interests, needs and demands.

2.4.2 An initial discursive exchange

ARIES initially adopted a simple approach of consulting professional associations and appropriate academics. Sustainability interest groups exist which meet irregularly under the auspices of the professional associations and provided a highly useful format for such an approach. Some of the academics had themselves been engaged in research about, or attempts to integrate, education for sustainability in accounting, and others could relate their involvement in discussions of a similar nature with professional or academic groups.

In each case the role adopted by ARIES was a scoping role – to ask, for example, why certain subject matter could not be introduced into aspects of accounting courses, using the framework of topics included in accreditation criteria.⁶⁸

⁶⁷ Taken from Patricia Blazey, Hope Ashiabor & Penelope Janu, 'Stakeholder Expectations for Generic Skills in Accounting Graduates: Curriculum Mapping and Implications for Change' (2008) *Macquarie Law Working Paper 2008/13*, <http://ssrn.com/abstract=1123784> (14 July 2009). Blazey et al use the category 'Employers of graduates' rather than 'recruiters' and others use the additional categories of 'opinion formers' and 'non-accounting academics' which are no doubt valid – see Rob Gray & David Collison, 'Can't see the Wood for the Trees, Can't see the Trees for the Numbers? Accounting Education, Sustainability and the Public Interest' (2002) 13 *Critical Perspectives on Accounting* 797-836.

The responses to these enquiries were recorded and in each case notes or minutes of meetings produced for confirmation of those present and for consideration by other discussion groups. The accumulated information provided guidelines for desktop research into education for sustainability in accounting.

Initially an ARIES representative attended a meeting of a selected group of invitees of the CPA to discuss findings in relation to research funded by the Australian Research Council concerning difficulties in collation of relevant business data in regard to sustainability. At this meeting we discussed a number of ways in which sustainability practice could be addressed within the terms of the profession's educational accreditation criteria. The meeting was introduced to detail from the *National Action Plan* and the project *Sustainability in the Key Professions*. Contact was maintained with key persons following this meeting.

Meetings were then conducted with staff from a number of accounting, business and economics faculties within the Sydney region. Discussions also took place by telephone and through email exchange. Notes of these discussions were maintained and provided to the participants for comment. The CPA was also informed of progress of discussions with an open invitation to comment. During this phase of the project the CPA advised after conversations with the Institute that the two professional associations wished to 'speak with one voice' in regard to the development of the program. Both associations indicated a strong desire to cooperate with ARIES in its project.

It was clear at an early stage, however, that one of the biggest obstacles to collaboration was finding appropriate venues and opportunities to meet with people who, while supportive, are obviously very busy.

2.4.3 Literature review

Against that background it proved useful to examine academic literature on the subject of sustainability integration in accounting education:

- to identify how stakeholders are categorised
- to ascertain what is known of the expectations of stakeholders in regard to the skills and attributes of graduate accountants
- to examine the issues associated with identifying and describing 'best practice' accounting education
- to examine the institutional framework that operates to administer accreditation of accountancy courses in recognition that accounting curricula are developed in full cognisance of the requirements of professional associations for accreditation.

2.5 Phase 2: Description of actions

2.5.1 Baseline data on sustainability content

Arising from these deliberations, at an early stage it became apparent that there is, in Australia, an absence of 'baseline data' concerning who is doing what in terms of sustainability education in accounting. Therefore,

ARIES undertook to design a survey of all accredited accounting schools in Australia in order to address this deficit.

The approach adopted was to select a range of subject matter that had relevance to a sustainability agenda. Sources included the Prince of Wales's Accounting for Sustainability Forum website, academic articles and ARIES's own resources. The aim was to direct the attention of those responding to the general nature of the subject matter. A total of 61 topics were included in the questionnaire, grouped under appropriate headings taken from the Accreditation Guidelines as follows:

- **management accounting:** including courses relating to budgeting, product and service costing, control and performance evaluation and strategic management accounting
- **financial accounting:** including courses covering an understanding of business finance and treasury function, including fundamental capital, investment, funding and risk decision concepts
- **auditing and assurance:** including accountability of external auditors under statutory and professional requirements
- **commercial and corporation law:** covering general legal knowledge relating to the business environment including law relating to corporate entities
- **economics:** covering microeconomics and/or macroeconomics
- **ethics.**

2 ABOUT THE PROGRAM

Some of the topics were repeated, sometimes in a slightly different format, under more than one heading (e.g. 'Life Cycle Analysis' was included under 'Management Accounting', 'Financial Accounting', 'Economics' and in a slightly modified form under 'Ethics'). In each case the respondent had the option of responding 'None of the above' and in each case an open-ended question allowed for a brief description of courses where the relevant topics were integrated into course content or where a specialist course existed which addressed the topics (in which case, respondents were asked to indicate if the topics were covered in graduate or postgraduate courses or both). The topics included are described in Table 5.

A copy of the relevant questionnaire is included as Appendix 1 to this report. This questionnaire has been forwarded to all accredited accountancy institutions in Australia requesting a response. The results from the questionnaire will be compiled once received from respondents.

2.5.2 Developing opportunities for an expanded discourse

At an early stage in discussions, it became apparent that relatively few opportunities existed for exchange between relevant stakeholders in professional education in accounting. This project was able to provide such an opportunity. Professor Benn from ARIES suggested cooperation with the Business / Higher Education Round Table (BHERT) – a body formed with a membership of about 25 universities and a wide

range of sponsoring businesses and professional and industry groups,⁶⁹ with whom discussions had taken place concerning a series of roundtables on *Sustainability in the Key Professions*.

This body is potentially able to exert a very wide ranging influence, with the possibility of significant system-wide change deriving from this unique opportunity. A gathering of key stakeholders in the accounting profession, brought together with the assistance of BHERT and held in a roundtable format, was proposed by ARIES. This approach represents a new model for dialogue within the key professions and may become the first of a series of such opportunities.

A brief was prepared on this approach and forwarded to the CPA, the Institute and others for comment and suggestions on the structure and the range of participants to be invited. A working group comprising representatives from Macquarie University, the University of Technology Sydney, ARIES and BHERT proposed that the numbers attending the roundtable should be limited to facilitate open discussion, and should involve 'high level' representatives from the professional associations, accounting firms, government, business, industry and the universities.

One advantage of working with the accounting profession is that many senior accountants hold positions and appointments that allow them to provide the views of a range of relevant stakeholder groups. Some academics who were present also act in a consultative capacity for a range of business and industry organisations.

The first Sustainability in the Key Professions (SKP) Roundtable was conducted on 17 November 2009 in Sydney, and was attended by 23 participants representing relevant stakeholder groups. A list of the participants and the organisations represented is included as Appendix 2. They included:

- senior executive of companies such as Westpac and PWC Australia
- executive officers of professional associations such as CPA Australia
- senior academics including university vice chancellors
- representatives of industry groups, such as FINSIA.

Notes arising from the SKP Roundtable dialogue are provided in Chapter 4. It is worth noting that this meeting was designed to serve the needs of the industry and was not primarily a research forum. For reasons of confidentiality it is not possible to provide attributable quotes.

This action became the subject of critical reflection regarding the impact and effectiveness of this type of dialogue and its potential for further change toward integrating sustainability into other professions.

TABLE 5: SUSTAINABILITY TOPICS

Accounting for externalities	Environmental responsibility / reporting
Resource accounting	Voluntary public environmental reporting
Accounting for environmental services	Regulatory measures including eco-taxes, subsidies and tradable permits
Product life cycle analysis	Acts relating to environmental reporting in the Australian context (e.g. relevant provisions of <i>Corporations Act 2001</i> , <i>Environmental Protection & Biodiversity Conservation Act 1999</i> , <i>Water Management Act 2000</i> , <i>Native Vegetation Act 2004</i> , <i>Environmental Planning & Assessment Act 1979</i>)
Waste reduction	Scenario modeling
Energy budgeting	Resource efficiency
Carbon use, carbon pollution, carbon offsets	Cost/benefit over time (action now vs. business as usual)
Environmental footprinting	Sustainability performance
Environmental protection, detection & failure costs	Water usage and energy efficiency
Balanced scorecard	Full cost reporting (internal / external)
Total Quality Management	Emerging environmental markets
Future scenarios	Extension of 'cap and trade' schemes to include other resources
Supply chain management	Integration of economic and environmental considerations in decision-making
Strategic pro-activity	The precautionary principle
Green opportunities (employment and growth)	Inter-generational equity
Carbon budgeting, investment in carbon markets	Conservation of biological diversity
Environmental risk management	Inclusion of environmental factors in the valuation of assets / services
Emerging 'green' markets	Polluter pays principles
Greenhouse accounting	Stakeholder engagement
Efficiency gains through environmental initiatives	Critical natural capital
Adaptive management	Social and environmental responsibility
Accounting for pollution, externalities and waste	Integration of intangible assets / ways to qualitatively measure these
Carbon accounting (offsets, savings and sequestration)	Challenging the business time horizon
Global Reporting Initiative (GRI) accounting	Future directions for corporate sustainability
Broad based business reporting	Coping with information in areas of risk and uncertainty
Connected reporting framework	Control of executive remuneration
ISO Standards accounting	
AA1000	
Triple bottom line reporting	
Ecological footprinting	
Social auditing	
Sustainability assessment model	
Environmental risk assessment	
Corporate environmental governance	
Accounting for emission rights/trading schemes	



3 SCOPING THE ISSUES

The first phase of the research required a focussing of the action to be undertaken in this program, in the light of both existing research on the issues and the initial meetings with stakeholders. This chapter details the preliminary findings of this phase of the research, setting the context for phase two, the SKP Roundtable.

3.1 'Fining down' the issues

The range of meetings described in Chapter 2 was productive in 'fining down' some of the key issues in the eyes of those involved, which in many cases corresponded closely with issues identified in the literature summarised in Chapter 1.

Some of the issues that emerged directly from discussions are summarised below:

- Accountancy involves certain core skills: definition, recognition, measurement, disclosure, assurance – a technical foundation that creates the very basis of, trust of, and confidence in accountants – a perception shared by academics and students alike. The delivery of this core is seen as fundamental to any accounting course, and indeed, it is essential to the role played by accountants in fostering sustainable practice.
- The economic significance of accounting courses to the educational sector and the Australian economy in general is a critical factor in the configuration of professional accounting courses. Competition for student enrolments is perceived by academics, practitioners and business leaders as a factor limiting prospects for change. Students, including international students, are said to perceive core components as central to what they wish to obtain from an accounting degree and therefore may be reluctant to contemplate radical change in accounting degrees.
- Academic staff strongly dispute the notion that standards of accounting schools have been in any way lowered to accommodate international students. Privately, many express reservations about the reliability of representations by some external institutions about the English-speaking capacity of some students.
- A large number of students undertaking accounting degrees have no intention to practise as professional accountants. These students are perceived to be amongst the most conservative when considering course change. Overseas students may represent a significant proportion of students in this category and, though such a conclusion must be regarded as speculative, the perception amongst staff that this may be the case can operate to inhibit proposals for course change.
- Accreditation may be a lever for integrating sustainability, but academics note that in a very busy curriculum what is being asked is to 'loosen, rather than tighten criteria'. If sustainability content is to be included, they ask, what is to be omitted? The 'accreditation route' was viewed as problematic and long term. One of the main reasons suggested was that it was driven by an institutional framework that may limit opportunities for stakeholder communication and innovation.



3

- There is an absence of 'baseline data' concerning who is doing what for sustainability education in accounting. There could be problems with designing a general survey. For example, a quantitative survey might well disadvantage the lecturer who has 'greened' course content, but equally there are problems with a 'tick-a-box', or scorecard approach. One-on-one interviews would be a preferred approach, though expensive and time consuming. A baseline survey combining a simple quantitative assessment with 'open-ended' questions might nevertheless be a useful starting point.
- Both academics and professional associations place a great deal of significance on the development of 'soft skills' as significant in education for sustainability in accounting.
- Topics in accountancy courses are seen as disjointed by students and staff alike. Sustainability content is seen as likely to be perceived this way. 'Sustainability' (described as such) was viewed as a problematic subject. One approach suggested was to view sustainability as an aspect of information systems in general, as sustainability issues involve new forms of communication.
- Discussions with academics suggested issues in two broad categories:
 - 1. Communication issues:** Accountants need to have data in a form amenable to the application of their knowledge and skills, but also need to be able to communicate to people from different disciplines and background the relevance of ordering information in such a manner as will allow for ready application of their 'core skills'.
 - 2. Resources issues:** Typically, these issues were referred to by reference to the non-existence of texts from which to work, but clearly encompassed a shortage of relevant human resources, teaching models and opportunities for innovation and staff training. It was also noted that the significantly small number of academics willing to work on expanding the sustainability agenda within accounting means that a top down organisational change may be appropriate.
- Developing a dialogue with professional associations was viewed as advantageous. It was suggested such a dialogue might be useful to canvas a number of matters, including:
 1. What if anything can be done using the accreditation criteria to promote mainstreaming sustainability in curricula?
 2. What resources can the profession produce to support this?
 3. Can the profession assist with research funding for this?
 4. What steps can be taken (e.g. in regard to continuing professional development) to institutionalise such an approach?

“ There is an absence of 'baseline data' concerning who is doing what for sustainability education in accounting. ”

3 SCOPING THE ISSUES

However, the experience of conducting these discussions raised issues that are also worthy of note:

- All of the people sought to engage in discussion were extremely busy. Meetings had to be arranged well in advance. This was in part a product of the interest being shown in sustainability issues at the time, driven by the proposals for the introduction of the Carbon Pollution Reduction Scheme in the Australian Parliament and international developments connected with the Copenhagen Summit, but it was also clearly a product of the nature of the work they do.
- The professional associations are accustomed to communicating with the public sector at a very high level. Opportunities for 'high level' exchange involving the academic community, the professional associations and other significant stakeholders appeared to be limited.

The three areas of concern investigated here were:

- the need for baseline data that would indicate current practice in sustainability education in Australia
- the requirement to develop accreditation criteria that would reflect the importance of sustainability skills and content
- the lack of high level dialogue about these issues, leading to a divide between the views of stakeholders in the industry and those in higher education.

Each of these areas was the subject of further investigation through the action research process. Action relating to finding baseline data is reported in Section 3.2. The issue of accreditation is discussed in Section 3.3. Action to address the lack of dialogue between stakeholders is reported in Chapter 4. A critical reflection on these actions is the subject of Chapter 5.

3.2 The issue of baseline data

Attempting to identify 'best practice' for embedding sustainability content in accounting courses in Australia (or indeed, elsewhere) has proven to be highly problematic. A number of reasons can be offered for this:

- Few publicly available course outlines for accounting contain any more detail than could be gleaned from a perusal of accreditation guidelines approved by the professional associations. Aside from course outlines, little data is available in a format that readily lends itself to comparison of courses at different institutions in relation to subject matter of interest to the present inquiry.
- Even if such data were more readily in the public domain there is little guidance available on appropriate measures to assess course content or delivery.
- The very subject matter of enquiry – whether described as 'soft skills' or 'sustainability' related subject matter or skills

– is something more akin to pedagogy than course content as revealed in course outlines.⁷⁰

- Assessments of what can be described as possible 'best practice' in related fields have focused on university-wide implementation of key competencies such as those described by Mayer, frequently manifested in the form of 'graduate attributes'⁷¹ – an approach which has attracted criticism⁷² and which gives little indication about progress in particular disciplines.

In regard to the first of these problems, the absence of baseline data as to what sustainability matter is being taught (in terms of content), the approach adopted in this program has been to disseminate a questionnaire to all accredited accounting schools seeking from them responses to establish a 'baseline assessment of sustainability content in Australian accounting courses'. The method of development of this survey was described in Section 2.5.1. The content of the questionnaire is set out in Appendix 1. The outcomes of the survey are due to be collated and reported in mid 2010. The outcomes of this survey will yield useful baseline data on which to build future initiatives to increase the sustainability content.

While such an assessment is rudimentary in nature, it is something that can be adapted and refined into a more sophisticated form of benchmarking in future years. Ideally, such basic information needs to be supplemented with

⁷⁰ This is illustrated in part by an examination of the 18 strategies described in the report of Hancock et al (above n34, p. 63 and Volume 2 of the report) which range from 'single easy-to-implement unit/subject level strategies, to program-wide intensive strategies such as the embedding of communication skills in the Master of Professional Accounting program at Macquarie University.'

⁷¹ See issue of B-HERT News April 2003 referred to at n40 above.

⁷² See comments of Pitman and Broomhall.

more detailed assessments which are beyond the capacity of the present program – in short, with detailed information concerning both content and pedagogical approach (directed at addressing the third and fourth as well as the first of the problems above) that could probably only be obtained by direct interviews with personnel at each of the 45 accredited accounting schools in Australia.⁷³

One example that illustrates the possibilities for a more comprehensive and direct approach to such assessments can be understood by examining the type of criteria used by the Aspen Institute Center for Business Education in its regular assessments of Masters of Business Administration (MBA) courses, titled *Beyond Grey Pinstripes*, which it describes as a process that seeks to spotlight ‘innovative full-time MBA programs leading the way in the integration of issues concerning social and environmental stewardship into the curriculum.’⁷⁴

The Aspen Institute uses four criteria for its rankings:

- **Availability of Relevant Courses:** This measures the number of courses with social, environmental and ethical content and asks how much opportunity students have to take courses with this content.⁷⁵

- **Student Exposure:** This measures teaching hours dedicated to considering social and environmental issues and the proportion of the student body taking such courses.
- **Relevant Courses on For-Profit Impact:** This is a simple count of the number of courses that demonstrate their relevance to the survey. Courses focusing on the non-profit sector or on ethics might get credit as ‘Relevant Courses’ but would not get credit under this metric, whereas a finance course that addresses models for pricing the cost of carbon would likely get credit.⁷⁶
- **Faculty Research:** This involves counting the relevant articles published in leading academic journals by staff.⁷⁷

An interesting sidelight on the *Beyond Grey Pinstripes* program is the Aspen Institute’s findings regarding changes within MBA programs over the last eight years:

1. *The percentage of schools surveyed that require students to take a course dedicated to business and society issues has increased dramatically over time, from 34% in 2001 to 63% in 2007 [to 69% in 2009].*
2. *Since the last survey in 2005, the number of elective courses per school dedicated to social/ environmental content has increased 20%.*

3. *The proportion of schools offering general social and environmental content in required core courses has increased in most business disciplines – Accounting, Economics, Finance, Management, Marketing, Strategy – since the 2005 survey.*
4. *However, the proportion of schools requiring content in core courses on how mainstream business can address social or environmental issues remains low [at 30% in 2009].*
5. *Of the 112 schools surveyed this year, 35 offer a special concentration or major that allows MBAs to focus on social and environmental issues inherent in mainstream, for-profit business.*
6. *Change is still occurring slowly when it comes to published academic research on social or environmental topics. In 1999, even top schools had as few as three to four published research articles on these concerns across the entire faculty. In the 2007 survey, only 5% of the faculty [in 2009 this increased to 7%] at the surveyed business schools published research on these topics.⁷⁸*

⁷³ Although there are 45 institutions listed as accredited in Australia, in some cases the structure of the schools is such as to require consultation with more than one person or at more than one campus.

⁷⁴ Aspen Institute, 2009 <http://beyondgreypinstripes.org/about/methodology.cfm> (31 January 2010).

⁷⁵ In the 2007 report this criterion was described as ‘Student Opportunity’ and did not include reference to ‘ethical’ content – see Aspen Institute, 2007 (above n19), p. 2.

⁷⁶ In the 2007 report this criterion was described as ‘Course Content’. The change of name suggests a more focused emphasis on the matters referred to in the second sentence of this paragraph.

⁷⁷ Aspen Institute, 2009 (above n19).

⁷⁸ Aspen Institute, 2007 (above n19) at p.2. Emphasis has been added to indicate changes noted in the Aspen Institute report for 2009 <http://beyondgreypinstripes.org/rankings/trends.cfm> (31 January 2010).

3 SCOPING THE ISSUES

The third paragraph suggests that in the view of the Aspen Institute at least, these criteria might well be applied to 'business disciplines' within which it includes accounting. The rankings for 2009 are attended with the following observation:

The most popular place to find courses with business and society content is not the CSR/Business Ethics Department. The top disciplines, in order, teaching about social, environmental and ethical issues are:

1. Management
2. Finance
3. Marketing
4. Corporate Social Responsibility (CSR)/Business Ethics
5. Accounting⁷⁹

79 Ibid.

Many of the courses that submit for assessment by the Aspen Institute include substantial accounting course content. Nevertheless the relevance of criteria employed to assess MBA courses to the assessment of accounting could no doubt be challenged. There are significant and obvious differences between MBA courses and accounting courses, including:

- Accounting courses have a highly specific focus on professional qualification, whereas the focus of MBAs is more generalised.
- Consequently, the structure of MBA courses would permit greater flexibility (more options, fewer core subjects) than would be the case in accounting.
- The student population attracted to MBAs is likely to be quite distinct from that attracted to accounting, and each group should be anticipated to have different expectations about course outcomes.

Notwithstanding those qualifications, the Aspen Institute criteria, because of their generalised nature, appeal as providing guidance on appropriate methods for assessment of accounting courses in terms of 'social and environmental stewardship'. Clearly they have been designed to provide some measure of objectivity in an arena that does not readily lend itself to objective assessment.

It is notable that those universities that have performed well in Aspen Institute rankings provide substantial information on their websites about course content and structure. In 2007 the top ranked course was that offered by the Stanford University MBA, and in 2009, York University's Schulich School of Business in Toronto topped the rankings. Both provide detailed information about their courses. A brief overview of those courses establishes a number of features in common quite separate from the factors which gave rise to those rankings:

“ Australia is fortunate in that its two professional bodies have adopted a uniform approach to higher education accreditation criteria ... ”



- Each of the courses features a common compulsory core.
 - Each includes in its compulsory core a requirement for experiential learning. At Stanford, this component can be satisfied by international work experience, one of two cross-cultural exchange programs (in China and India) or by participation in student-initiated opportunities to interact with global leaders. York University requires students to participate in a strategy field study which is described as the capstone of the Schulich MBA. Groups of seven or eight students undertake comprehensive strategy studies of large or small, profit-seeking or non-profit, entrepreneurial or mature, service or manufacturing, domestic or international organisations.
 - Both institutions offer a large range of elective courses which perhaps, not surprisingly, feature courses that are clearly within the category of 'Relevant Courses' or 'Relevant Courses on For-Profit Impact' in accordance with the Aspen Institute criteria above. It is notable, however, that electives are grouped to indicate a level of general vocational relevance. For example, Stanford offers electives that are appropriate to Entrepreneurship, Leadership and Public Management, the last of these being divided into 'Government', 'Non-profit' and 'Socially Responsible Business' categories.
 - Each gives strong prominence and publicity to the requirements of experiential learning and the need to establish a vocational focus.⁸⁰
- These observations, coupled with other general observations of the structure of courses in 'business disciplines' at American universities suggest that those involved in structuring accounting courses there have taken to heart the recommendations of the Bedford Committee for 'revised, expanded curriculum, a more effective education process, and a better articulated structure for the institutional units through which the programs are offered'.⁸¹ They have also taken on board the 2000 Taylor Report recommendations for establishing a combination degree program with a related discipline, developing accounting/ systems degrees and/or developing accounting/finance degrees.⁸² Indeed, such approaches also appear to have won favour outside the United States.
- It also suggests a greater degree of flexibility may be evident in systems for accreditation of American accounting courses than is the case in Australia.

3.3 The issue of accreditation

In considering how to approach accreditation issues it is appropriate to consider first the unique position, in comparison to other professions, of the practice of accountancy in Australia. Both the CPA and the Institute are members of the International Federation of Accountants (IFAC) – a global organisation with 157 members and associates, mostly national professional accountancy bodies, from 123 countries and jurisdictions representing 2.5 million accountants employed in public practice, industry and commerce, government, and academia. Members are bound to apply IFAC's education standards as the principal basis for accreditation.

While IFAC has demonstrated a commendable willingness to entertain suggestions for change, major changes present challenges, not the least of which are the basic logistics of reaching agreement in such a large body. Australia is fortunate in that its two professional bodies have adopted a uniform approach to higher education accreditation criteria, though each maintains its own standards in regard to membership qualification and continuing professional development.⁸³ The existence of such a system of accreditation means that Australian-educated accountants can be qualified in accordance with standards that are recognised world wide. The relevance of this is reinforced

⁸⁰ See Stanford University websites http://www.gsb.stanford.edu/mba/academics/year1_detailed-p.html and <http://www.gsb.stanford.edu/research/courses/electives.html> and York University websites <http://www.schulich.yorku.ca/ssbxtra/mba.nsf/allwebdocuments/core+courses> and <http://www.schulich.yorku.ca/ssbxtra/mba.nsf/allwebdocuments/elective+courses>.

⁸¹ Bedford Committee Report (above n33), p. 179.

⁸² See Taylor Research and Consulting Group Inc. *Student & Academic Research Study: Final Quantitative Report* (2000).

⁸³ Institute of Chartered Accountants in Australia and CPA Australia (above n68). In the United States of America, for example, there are four major professional associations, only one of which is a member of IFAC, but accreditation criteria are maintained by 54 state, federal and territorial government agencies.

3 SCOPING THE ISSUES

when one considers the numbers of accounting students from overseas locations that obtain their qualifications from universities that apply comparable standards to those that apply in Australia (see Tables A and B in Appendix 4).

Figure 3 (following) illustrates the role of professional associations in accreditation of universities and administration of continuing professional development (CPD) and the communication routes that exist in this regard. This figure is based on an examination of primary documentation from bodies such as IFAC and the CPA, and discussion with academics. It represents a comprehensive mapping of the network of interactions that underpin processes of accreditation. The circled area indicates an area where it suggested there is room for improvement in communicative interaction.

Although the figure may suggest that communication between universities and the profession in regard to national accreditation criteria is strictly one way, that would not accurately reflect the true position. However, it is evident that few opportunities exist for consultation between the universities and the professional associations, or to promote direct feedback to either of these parties from the client base. The figure is drawn to reflect the formal, rather than informal, channels that may exist.

Improvement of communication between the relevant stakeholders is now critical for two primary reasons:

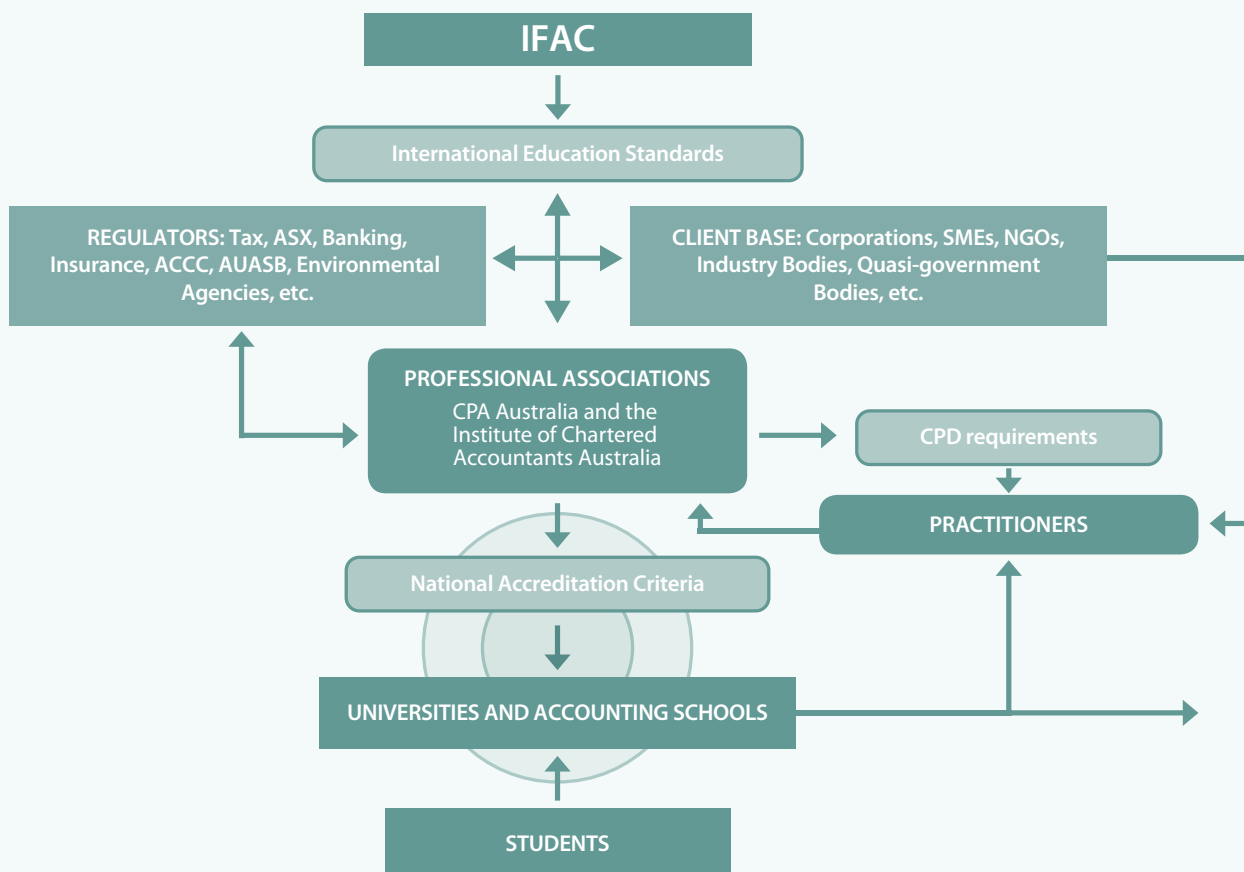
- Professional accreditation criteria are clearly regarded by some as being the sole and central focus of course material – criteria to be regarded as sensitive, even immutable – a view which presents a barrier to change and innovation.

- On the other hand, competition for student numbers forces others to value alternative (mostly international) university accreditation systems as having more significant impact,⁸⁴ and therefore to be regarded as having higher priority – an approach which runs the risk of devaluing input from local practitioners.

The action undertaken to bring about (eventual) change to accreditation and course design so that sustainability may be integrated into accountancy education – the Sustainability in the Key Professions Roundtable – is described in detail in the following chapter.

⁸⁴ During our discussions the view was expressed that some universities might in the long-term regard accreditation by the Association to Advance Collegiate Schools of Business (AACSB) as being more significant than accreditation by the professional associations. US schools applying for ranking by the Aspen Institute are required to be AACSB accredited – a restriction not applying to non-US schools. At present one Australian accounting school and six Australian business schools are AACSB accredited.

FIGURE 3: THE ROLE OF PROFESSIONAL ASSOCIATIONS AND OTHERS IN ACCREDITATION PROCESSES





4 DIALOGUE WITH STAKEHOLDERS

The roundtable dialogue-styled Sustainability in the Key Professions: *Skills for the New Economy: The Accounting Profession* was conducted on 17 November 2009 in Sydney with the objective of enabling a high-level dialogue between business, government, the professional associations and universities to discuss issues of mutual concern regarding professional accounting skills for the future, and to provide measures for ongoing exchange and dialogue. A list of participants and represented organisations appears in Appendix 2. An agenda for the discussion, detailing key topics to be considered is shown in Appendix 3.

The dialogue was remarkably frank and robust, even blunt. As with the range of initial meetings with involved parties described above (see Chapter 3), the roundtable was productive in isolating some of the key issues in the eyes of those involved. The exchange is described below, grouped around the following five themes:

1. The Future Role of Accountants – Changing Modes of Regulation
2. Universities, Professional Associations and Accounting Education
3. Problems of an Interdisciplinary Approach
4. Essential Skills
5. Defining a Broader Agenda.

4.1 The future role of accountants – changing modes of regulation

- Twenty five years ago business looked at the environment solely through the lens of the regulator. The shift from command and control models of regulation is significant because ‘command and control’ recognised no stakeholders. The challenge is to match the ‘licence to operate’ to societal expectations, but recent developments suggest it is necessary to reconsider who are appropriate stakeholders (e.g. clients, regulators, capital markets) and identify their different demands. This challenge becomes more difficult when government itself is under-resourced and under-skilled and economic, technological and other pressures suggest a need for corporations to go beyond compliance. As governments move out of the business of regulation, there is a greater dependence on more vaguely formulated standards and requirements for certification with attendant risks.
- Business is the core of modern society and within business the financial sector occupies a powerful role.

Business is undergoing a major transformation necessary for the 21st century where innovation dominates. Creating a sustainable organisation is an opportunity to reposition business for the future and accountancy must play a vital role in this function. This entails new organisational goals, new strategies and new markets with a broader view of what needs to be accounted for. Accountants are the key gatekeepers for what is accounted for, not just in the financial arena but also in terms of the environmental impacts on society.

- There is concern that because it is difficult to ascertain the financial value to be placed on, for example, triple bottom line reporting (TBL) and corporate social responsibility (CSR) there may be a ‘sub-priming’ of appropriate standards⁸⁵. The difficulties of ascertaining long-term value and long-term interests adds to the risk factors and the demands of a new carbon market. Markets in new areas, such as water and biodiversity, indicate the problems of unbuilt infrastructures. New frameworks and new electronic and other technologies have an ‘inbuilt’ demand for adoption and acceptance, but other areas of innovation are, by their very nature, disruptive.



4

4.2 Universities, professional associations and accounting education

- Accountants' core skills are in the arena of financial reporting – definition, recognition, measurement and assurance. At the core of financial reporting is determining what should form part of a report. There is little demand from students to shift from the focus of financial reporting. If new approaches to reporting are to be mandated they may inaccurately interpret the demands of a changing world. Yet business has little confidence in graduates demonstrating ability in key areas of communication, teamwork and problem-solving.
- Accountants are familiar with 'technical skills' but less acquainted with 'soft skills'. Graduates may possess key competencies but they struggle with strategic vision. Graduates and the profession in general need to develop more collaborative approaches.

4.3 Problems of an interdisciplinary approach

- The shift to a multi-stakeholder approach is a shift to an interdisciplinary approach. The GRI and other 'tools' lend themselves to such an approach. Businesses now recognise the value of interdisciplinary skills but are dissatisfied with the skills of new graduates.
- The challenges of an interdisciplinary approach are:
 1. to develop a mindset – i.e. that interdisciplinary behaviour is going to happen
 2. to build capacity – the hard skills and the new core skills necessary to interpret and interpolate new markets.
- The professional associations are of the view that sustainability does and will drive future business models. Continuing professional development education is driven by demand by members and it is heavily influenced by regulation and a desire to have tools to operate on a day-to-day basis. There is, however, insufficient dialogue between financial and non-financial reporting.

- There may be a need to think differently – to abandon the 'front end model' of teaching. Graduates don't need to graduate with 'all they need to know' – in fact the knowledge they acquire under such a model may have a relatively short 'half life'. The focus should not be on content but on skills of learning. The goal should be to lay the foundation for postgraduate study and lifelong education. In essence the existence of Continuing Professional Development programs is recognition of the short 'half life' of university training.
- Universities need to collaborate internally to establish quality and consistency. The problem is that sustainability has always been treated as a fringe issue and it would be best handled on an interdisciplinary basis. Universities need to integrate sustainability within all faculties.

4.4 Essential skills

- Communication skills, teamwork skills and problem solving skills now form the 'core' of what may be needed in a wider, more generic training ground which has to encompass new challenges, new markets, new audiences, new subject matter,

4 DIALOGUE WITH STAKEHOLDERS

non-financial reporting and associated data-collection in new areas of accounting and assurance.

- However, there are concerns that:
 - there is no price signal driving such a change
 - the professions will tend to act as gatekeepers
 - there are few means of communicating the marketability of desired generic skills
 - change is driven by international, not national, circumstances
 - globalisation will drive (or has driven) a 'sub-priming' of accounting education.

4.5 Defining a broader agenda

- There was general agreement that these topics are for the professions to manage and that the professional associations have to own them primarily. Also for consideration is the role of government (e.g. Treasury) in these activities.
- With the assistance of the Chair, Professor Mark Gabbott from Macquarie University, those present at the roundtable identified five key topics emerging from the dialogue, outlined here as questions:

1. What are accountants going to be doing in 2020?
2. What are the universities doing about design, resources and delivery of accountancy education?

3. What is the role of professional associations in accreditation and the broader structure of accountancy education?

4. What is the profession trying to achieve and what is the value of that:

- (a) to corporations?
- (b) to students?

5. What is the role of regulation?

While this report does not purport to provide answers to each of these questions it is hoped it might offer some concrete suggestions on issues to be considered under those headings. Ultimately it is the key stakeholders in accounting that are best placed to enunciate and elucidate the needs and the requirements of the profession. As stated elsewhere, the role of ARIES has been to facilitate rather than direct, to consult rather than to advise, and ultimately to provide a forum for dialogue.

4.6 Sustainability in the Key Professions – a continuing program

The participants of the roundtable were appreciative of an opportunity to exchange views with the professional associations and the universities. They expressed the view that it opened channels for communication on issues of importance to the key stakeholders that had not previously been open. While many of the participants were of the view that the prime movers for implementing change

should be the universities and the professional associations, they were keen to provide input to a working party to advance change processes that they saw as being of mutual benefit. The roundtable process, and the associated working party, were seen as having the potential to resolve the divide in expectations between industry on the one hand, and professional education systems on the other.

A similar divide in expectations between industry and education was observed in the earlier ARIES study of sustainability in business schools; and a similar approach to developing a dialogue amongst key stakeholders is inferred to be of value in that system of accreditation. The SKP Roundtable format can thus be regarded as a **unique model that may be applied to other key professions** such as business or law, and other industries such as building and construction. A strength of this model will be to establish a structure that the professions can then own themselves.

At the conclusion of the roundtable it was agreed that a working party should be formed to develop these themes. The representative of the CPA indicated that the professional associations would be willing to participate and to date a further six of the participants have volunteered to take up membership of the working party.

As noted in Section 2.5.2 the SKP Roundtable was facilitated through the Business and Higher Education Roundtable (BHERT) and a working party comprising representatives of Macquarie University, UTS and ARIES on the basis that it might

provide a platform for future roundtable conferences involving other key professions. Macquarie University, through ARIES, was the lead organisation of the Accounting Roundtable, but it was recognised

that the working party would provide for other universities to take the lead in regard to roundtables in other disciplines. Shortly before finalisation of this report the University of Technology Sydney

agreed to be the lead organisation of a roundtable addressing the building and construction industry. Table 6 lists the agreed actions of the working party.

TABLE 6: OUTCOMES OF THE ROUNDTABLE

What Will be Done	By Whom	By When
1. ARIES will circulate the record of the discussion, collate individual feedback and the contact details of those who attended.	ARIES	19.12.09 Completed
2. A short brief on each of the key themes will be prepared for distribution and response.	ARIES	By end of March 2010
3. A request will then be made for volunteers to develop the themes.	ARIES	By end of March 2010
4. A teleconference with UTS, ARIES and B-HERT to plan the 2nd Roundtable involving the building & construction industry.	BHERT	By end of January – beginning of February
5. Baseline survey on current teaching of sustainability in the Accounting discipline across all Australian universities to be sent out and analysed.	ARIES	By end of February
6. Proposal for funding developed to implement outcomes from accounting, building & construction and legal roundtables and to roll out to other relevant professions.	ARIES and BHERT	By end of February

As an aspect of the action research project, the researchers recognised the benefit of collaborating with BHERT in establishing dialogue across leading business and accountancy schools, the profession and the professional associations. In association with these discussions Macquarie University became a member of BHERT and has collaborated with UTS and other members of BHERT in furthering this project.

It is expected that further Sustainability in the Key Professions projects will be conducted with Sydney University and perhaps Australian National University concerning such professions and industry sectors as planning, building and construction, health sciences and law. BHERT has assisted the project in gaining high-level representation and in ensuring this initiative will continue beyond the term of this project conducted on behalf of DEWHA.

“ Accountants’ core skills are in the arena of financial reporting – definition, recognition, measurement and assurance. ”



5 CRITICAL REFLECTION ON ACTION

This program of research undertook to contribute to section 3.2 of the National Action Plan,⁸⁶ namely:

The Australian Government will work with peak industry bodies, professional associations and non-government organisations, using existing networks where possible, to develop and deliver workplace learning, professional development, mentoring for sustainability, and sharing best practice. (p. 25)

The aim was to work with representatives of peak bodies and existing networks within the accounting profession to deliver change toward sustainability. This chapter offers reflections on the outcomes of the work undertaken in this program, and considers a future direction for research in this area.

5.1 Roundtable forum

One key outcome of the program has been to facilitate a roundtable forum that, in its focus on the future of the accounting profession, was probably unique. By working with this group ARIES created new avenues for dialogue around issues which had been flagged as barriers towards sustainability

inclusion in accounting courses. The robust exchanges that took place between representatives of the accounting profession, government, business, industry, the finance sector, professional groups and universities, served to illustrate in no uncertain terms that key stakeholders had not voiced, or had not had an opportunity to voice directly to universities or the profession, their dissatisfaction or disquiet concerning the future of the profession. The roundtable defined the 'broader agenda' of issues in development of skills in accounting.

A key concern expressed through the roundtable forum is that student attitudes don't accord with what is perceived as being necessary development and modification of accounting courses that will be in their long-term interests – their perceptions don't match the realities of their employment prospects. Similarly the perceptions of business are that appropriate changes have been resisted by the universities in order to attract more fee-paying students, which may simply be a product of the fact that courses have not changed to meet business expectations. The fact that business representatives

have chosen to express this in very robust and provocative terms gives eloquent voice to their frustrations. Without the roundtable they would have no forum to express their concern, or at least no forum where they can express it directly to academic staff and the professional associations.

The system of accreditation by the professional associations of accounting courses has been identified as one area which might afford an opportunity for influencing or even mandating change in accounting education. It is a system that operates within a global context which allows for accountants to have their qualifications recognised internationally. But while the principal international body – IFAC – has demonstrated a readiness to embrace change, the process of accreditation does not lend itself to speedy reform processes. The structure of the system of accreditation, however, offers clues on 'institutional gaps' in relation to communication of the needs and demands of industry and business in relation to accounting education. In particular it indicates a need to open up opportunities for better communication of issues in



5

common between the universities and the profession. The fact that the **professional associations, industry groups and universities have each identified various 'soft skills'** that they view as essential to the development of accountancy education (and we would add essential to the embedding of sustainability skills in the curriculum) indicates a distinct path for advancement. The fact that **the description of these skills in each case is similar yet not identical** is another basis for suggesting the need to open a forum for continuing dialogue and cooperation.

The roundtable exchange, and the broader agenda it identified, served to illustrate the need for

universities and the professional associations to engage in a more productive level of dialogue in regard to the embedding of key skills for sustainability (whether so badged or not) in accounting education and professional development. The broader agenda implies that the universities and the professional associations should occupy the role of key protagonists in such a process. It also suggests that **regular reference to representatives of key stakeholders** – the profession's client base – is appropriate. Much will depend on whether participants can see their way clear to continuing engagement in the form of working parties that seek

to provide a stronger definitional basis of professional needs, curricula requirements and practical approaches to implementation that **maintain professional integrity yet adapt to the changing demands** of the economy, society, and the environment.

“ ARIES created new avenues for dialogue ... ”



5 CRITICAL REFLECTION ON ACTION

5.2 Survey

Another key outcome of the program has been the development and delivery of a survey to determine baseline data about the extent to which sustainability skills and content are currently included in accounting courses in Australian higher education institutions. Participants in the scoping project emphasised the lack of suitable baseline data that could be used to support further efforts for change toward sustainability. This program made a preliminary effort in the formidable task of collecting reliable data nationwide. This report suggests ways in which future projects might adapt instruments used in the US to gather more definitive data regarding current levels of inclusion of sustainability within accounting.

5.3 Process of change

Through discussions with stakeholders and examination of the literature, the program was able to map the complex network of bodies that exert influence on accounting accreditation criteria. This enabled a more effective targeting of the key representatives of the profession and their higher education counterparts for the purposes of later discussion. As a result of the roundtable there is a commitment to action to begin the process of change towards a different system of accreditation that will be inclusive of sustainability. As the accounting profession is subject to global and national pressures that both drive and inhibit change it is expected that a culmination of this process may take time. Change may be dependent on changed attitudes and perceptions amongst the clientele, which has been shown to include a large number of overseas students. It may also include changed perceptions amongst those designing and offering courses about what that clientele demands.

There would appear to be a strong argument for conducting further research about the needs and perceptions of the student base in the Australian context, given the significant role of overseas students. The research presented in this report flags some of the important questions that might be asked in such a research project, but the critical issue is to determine what drives student perceptions in regard to course composition and how universities can respond to student demands in a manner that better suits the long-term interests of graduates. The settling of this contentious point might go some way towards ameliorating what appears, currently at least, to be a source of division within the accounting profession.

A research program such as the one conducted here, relies on the perceptions of participant stakeholders. A strength of this approach is that by involving these participants, the key change agents within the industry become involved in discussion. From this beginning they can focus on new priorities and



begin further actions for change. There is evidence of this happening in the list of outcomes from the roundtable. A limitation of this approach is that opinion cannot replace information and fact, and more hard data may be needed before strong conclusions can be drawn. For example, as alluded to above, the needs of the clientele, as opposed to the perception of these needs, has to be established. A great deal is potentially at stake, as the importance of accountants within the business sector, and the importance of the business sector for the development of a sustainable world, have both been noted. This program should be considered as first step in a larger research effort to integrate sustainability into the key profession of accounting.

Having made this caveat, the findings of the research conducted here largely accord with those of the current literature reviewed in Chapter 1. The findings on student and staff attitudes agree with similar findings of ARIES in regard to

business and management schools. These attitudes are in clear conflict with **the need for development of 'soft', 'generic' or 'non-technical' skills** identified in the academic literature of accounting over many years. The professional associations for their part have reached similar conclusions about the need for development of such skills, recognising that despite increasing graduate numbers, the number of professionals choosing to practise in Australia is predicted to decline and the demand for those possessing these broader skills is increasing.

Those amongst the academic community who resist change (and many who espouse it), point to the need to provide all new accountants with appropriate, foundational, core skills, the crowded nature of the accounting curriculum and the lack of appropriate resources to allow upskilling of staff and ease of implementation of new content. Critics from the finance and business sectors perceive that in the **global competition for accounting students** which is significant to the

economic welfare of universities and the Australian economy in general, universities have elected to 'sub-prime' accounting degrees to boost enrolments. Certainly concern is often expressed about whether change to degree content will make a particular school more or less competitive with other accounting schools. Here, it is notable that there is **little information freely available** for exchange between accounting schools **about** what **sustainability content** or approaches are being used in each school, a situation that inhibits understandings of whether or not such approaches might indeed offer a competitive advantage rather than a disadvantage.

“ As a result of the roundtable there is a commitment to action ... ”





6 KEY FINDINGS AND RECOMMENDATIONS

The overarching question for this research program was: *What are the drivers and barriers to progressing the integration of sustainability into the accounting profession?*

This chapter summarises the key findings relating to barriers and drivers that were identified by the review of the literature and the actions undertaken by ARIES. These findings are then used as the basis for recommendations for further action.

6.1 Drivers, barriers and opportunities

1. The accounting profession is affected and driven by **global pressures** for change for sustainability which are **felt unevenly across the profession**, probably due to client resistance. Business pressures such as those derived from the **investment and finance sectors** and the persuasive **influence of governments** play the most significant role in driving change. In that context, however, **international standards** of the accounting profession and **national accreditation systems** can act as a **barrier** to change because of **international competition for student numbers**.
2. More needs to be done to improve the **perception of sustainability skills**, so that courses featuring the development of these skills are seen as providing a **competitive advantage** for both students and universities, rather than as an unfashionable, unpalatable or unnecessary option.
3. While it is important to consider the resources and communication issues raised by academics it is **the issue of communication** that deserves priority. That is, it is reasonable to assume that appropriate communication of the competitive advantage to be gained from acquisition of skills that are key discriminators in employment will drive student demand, and equally that resources will be developed to meet that demand.
4. When considering drivers of operation within the accounting profession, one must take into account that both objectively and in the subjective perception of accountants, **the most important considerations** centre on the needs and demands of **the profession's client base**. The client base of accountancy is a highly sophisticated and critical audience. While parts of that audience may in some cases embrace, and in other cases strongly resist, change they appear to share a measure of **dissatisfaction with the skills demonstrated** by accounting graduates, and an impatience about the failure of accounting schools to produce graduates who possess a range of skills appropriate to a changing and more demanding economic environment.
5. One highly significant factor emerging from this research program is that although there may be differences in description over the years of what we call for convenience 'soft skills', studies in regard to prospective employers of accountants indicate that these **'soft skills' are used as discriminators in employment**. That is to say, as between two graduate candidates for employment, each possessing equivalent 'core skills', employers are more likely to engage the candidate who demonstrates 'soft skills' in communication, teamwork and problem-solving. To those familiar with sustainability issues, these 'soft skills', though not branded as such, clearly represent those adaptive



6

skills which are central to the embedding of sustainability in accounting education. The significance of this is twofold:

- Whether members of the client base of the accounting profession can be counted in the ranks of those who resist change or welcome it, their demands for improvement in the skills of accounting graduates look to the development of skills appropriate to a sustainability agenda.
 - To the extent that students and academic staff resist the adaptation of accounting courses to better encompass such 'soft skills', on the basis that there is no client demand for such skills, they misread the demands of industry and business.
6. There is a strong perception that there is a very real **division within the profession** – that it is possibly divided into those who, in their clients' interest see no need for development of these new skills, including sustainability capabilities, and those who, again in their clients' interest, recognise that these skills are in short supply.

7. The **commitment of the professional associations** to provide leadership in embedding accounting for sustainability within their organisational strategies and operations and to drive thought leadership – increasing understanding of good sustainability practices – is timely and significant. The leadership example of the professional associations needs to be complemented with support from **leaders of business and industry** to promote **recognition of the significance of accountants** in the design and implementation of sustainability reporting systems to a wider audience (and therefore, hopefully to prospective students) and the need to graduate **more accountants with adaptable core skills**.

8. The **most significant barriers to change** in accounting educational practice appear to stem from the **attitudes** of students – and here, many would point to a lack of appropriate price-drivers for change – and (some) academic accounting staff. The following four issues describe the broad nature of the problem:

- Non-financial accounting is not afforded by students and staff the same status as financial accounting.
- Sustainability practice is perceived as a specialist 'backwater' associated with environmental accounting or accounting for natural resources.
- The need for developing interdisciplinary or transdisciplinary skills is not appreciated or fully understood.
- 'Technical' skills are promoted to the detriment of 'non-technical' skills, and the merits of adapting 'technical skills' to 'non-technical' arenas is not given sufficient weight.

“ ... 'soft skills' are used as discriminators in employment. ”

6 KEY FINDINGS AND RECOMMENDATIONS

6.2 Recommendations

Based on these key findings the principal recommendations of this report are:

1. An examination of the roles accountants have played and can play in accounting for sustainability suggests that existing **core skills of accountants can be adapted** to address sustainability issues, provided they are enhanced with the development of certain 'soft' or 'generic' skills that have been recognised, but which need further elaboration and definition. Indeed, these skills need to be taught in a manner that allows accountants to address systemic barriers to the application of their skills to the burgeoning subject matter of sustainability. We suggest that appropriate adaptation of core curriculum offers the best opportunity for incorporating material relevant to sustainability issues with the minimum disruption to curricula.
2. While sustainability reporting may require transdisciplinary cooperation it is accountants who should have the primary responsibility as 'key information providers'. It is only accountants who can provide the appropriate levels of trust and assurance in relation to issues of increasing complexity in areas where some anticipate that information that has 'public good characteristics' is 'likely to be underprovided by the private sector'.⁸⁷ More emphasis should be placed in all courses on the **role of accountants in**

advising and informing critical decision-making.

3. The development of 'soft' or 'generic' skills within accounting courses is central to the embedding of sustainability in the core curriculum. A **transdisciplinary approach to developing communication skills, teamwork skills and problem-solving skills** is probably best achieved by requiring students to partake of some form of **compulsory experiential learning**, or by the introduction of **mandatory core units focussed on communication** with other disciplines (e.g. 'communicating with engineers' or 'communicating with scientists'). We repeat that the focus of such programs should be on the key role that accountants play in decision-making, and point to the operation of the legally defined sustainability principle of '**improved valuation**'⁸⁸ in informing decision-making as one aspect of how core content can be adapted to better inform students of complex realities they may encounter in the workplace.
4. It follows that these recommendations countenance an approach whereby sustainability principles become incorporated as part of a broader strategy for improving skills in communication, teamwork and problem solving while exposing students to the challenges of, for example, evaluation of assets and services in a manner that takes account resource usage, life

cycle analysis and polluter-pays principles. This approach does not suggest that the avenues be closed for those who wish to learn solely about financial accounting, nor does it suggest that specialist courses on sustainability subject matter are inappropriate. Rather, it addresses the issue of the need to adapt core curriculum to elevate non-financial reporting to equal status with financial reporting.⁸⁹

5. The recommendations of American reports on professional education for accountants are pertinent to the Australian situation, and with minor modifications we respectfully adopt them:
 - There is a need for a revised, expanded curriculum, a more effective education process, and a better articulated structure for the institutional units through which the programs are offered.
 - Universities should consider establishing a combination degree program with a related discipline or developing accounting/ systems or accounting/ finance degrees.
 - Based on what can be regarded as 'best practice' in the structure of MBAs, courses should be restructured to inform students of a wider range of vocational options and offer opportunities and understandings to develop skills more directly focused on those options.

⁸⁷ See Ross Garnaut, *The Garnaut Climate Change Review: Final Report* (2008), pp. 406-7.

⁸⁸ See the summary of ESD principles at Section 2.1.

⁸⁹ It is interesting to note that in New Zealand the existence of a single standard for audit of financial and non-financial reporting (New Zealand standard AS 100) is perceived to have been a significant driver for embedding sustainability and business ethics principles into core subject areas – see the NZICA website and *Sustainability Matters*, 28 May 2009 <http://www.sustainabilitymatters.co.nz/>.

6. Following on the recommendations in points 3, 4 and 5 an approach that commends itself as efficacious is to more closely integrate accounting courses with other business disciplines at accredited universities with a common core of mandatory subjects that would include experiential learning or courses focussed on communication as described in point 3. While it might impose a marginally greater burden on students, this would be balanced by offering a range of vocationally focussed qualifications at the conclusion of a basic degree. Core subjects designed to develop communication and decision-making skills could be accredited as part of an accounting/systems or accounting/finance degree, or count towards a combination accounting/MBA or specialist degree in, for example, accounting/public management. The mandatory core subjects in the Stanford MBA provide useful illustration of the range of subjects that could be contemplated.⁹⁰
7. We endorse the comments of Blazey et al concerning business law curriculum as being relevant to accounting:

Academics need to better inform students about generic skills in the core units, such as analysing issues and arguing effectively, to eliminate this lack of understanding on the part of students and graduates. There is a need for a curriculum change whereby the development of generic skills is given a higher profile within traditionally heavily content based business law units.⁹¹

8. Professional associations have a role to play: they should be encouraged to **accredit only programs that present accounting as an economic or decision-making development and distribution function**⁹² and should themselves foster and endorse innovative approaches to the restructuring of accounting programs, and publicise the significance of changes to accounting courses, teaching methods and standards.
9. We also suggest that business, industry and government all have a role to play in providing accounting students with a platform for vocational experience, and in working more closely with universities and the professional associations to provide opportunities to explore the relevance of concepts such as sustainability to their future field of practice. Improving

communication between the professional associations, the universities, business and government in regard to the development of future skills for accountants is the most significant recommendation of this report.

We note two recently published reports,⁹³ and current research⁹⁴ by groups of universities prepared under the auspices of the Australian Learning and Teaching Council as important first steps towards embedding sustainability principles in accounting education in Australia.

Any approach to mainstreaming sustainability in accredited business education and practices in accounting has to commence with opening up a dialogue between industry, the professional associations, government bodies and accounting academics to give better definitional reality to the nature of the generic skills that are essential to this task. The roundtable forum has contributed to this process and it is to be hoped that follow up work by working parties involving an exchange between the universities and the professional associations with links to a broader range of stakeholders will do much to facilitate the mainstreaming of sustainability into professional education of future accountants.

⁹⁰ The 18 mandatory core subjects at Stanford include Critical Analytical Thinking, Modelling for Optimisation and Decision Support, Managerial Finance, Managing Groups and Teams (which lend themselves to experiential learning or the development of other communication skills), Managerial Accounting, Financial Accounting, Ethics in Management and 11 other topics, some of which have a management emphasis, and some a more readily identifiable accounting focus. See http://www.gsb.stanford.edu/mba/academics/year1_detailed-p.html. It is not suggested that a basic accounting qualification should require completing the entirety of such a core.

⁹¹ Blazey et al (above n45), p. 35 (emphasis added).

⁹² See Bedford Committee Report (above n33), p. 195.

⁹³ Hancock et al and Freeman et al (above n34).

⁹⁴ The current research, involving cooperation between seven universities, is headed by Dr Leigh Wood at Macquarie University, and titled *Embedding the Development and Grading of Generic Skills across the Business Curriculum*. It has trialed some highly innovative approaches to experiential learning and the development of communication, teamwork and problem-solving skills.



7 BIBLIOGRAPHY

Cases and Legislation:

Australian Securities and Investments Commission, in the matter of Chemeq Limited (ACN 009 135 264) v Chemeq Limited [2006] FCA 936.

Gray v Minister for Planning [2006] NSWLEC 720.

Kim Riley in his capacity as Trustee of the Ker Trust v Jubilee Mines NL [2006] WASC 199.

King v AG Australia Holdings Limited (formerly GIO Australia Holdings Limited) [2003] FCA 212.

Corporations Act 2001 (Cth).

Protection of the Environment Administration Act 1991 (NSW).

Websites:

AA1000 Series of Standards
<http://www.accountability21.net/aa1000series>

ARIES (generally)
<http://www.aries.mq.edu.au/>
<http://www.aries.mq.edu.au/projects/MBA3/>

<http://www.aries.mq.edu.au/projects/MBA2/>

<http://www.aries.mq.edu.au/projects/MBA2/files/BusSchoolsBrochure2ndEd.pdf>

Aspen Institute Center:

Beyond Grey Pinstripes
<http://beyondgreypinstripes.org/index.cfm>

<http://beyondgreypinstripes.org/rankings/index.cfm>

<http://beyondgreypinstripes.org/rankings/trends.cfm>

<http://beyondgreypinstripes.org/about/methodology.cfm>

Business / Higher Education Roundtable

<https://www.bhert.com/index.html>

Global Reporting Initiative

<http://www.globalreporting.org/Home>

Sustainability at Work: The Connected Reporting Framework

<http://www.sustainabilityatwork.org.uk/strategy/report/0>

Sustainability Matters: (28 May 2009)

<http://www.sustainabilitymatters.co.nz/>

Dow Jones Sustainability Indexes

<http://www.sustainability-index.com/>

Stanford University

http://www.gsb.stanford.edu/mba/academics/year1_detailed-p.html

<http://www.gsb.stanford.edu/research/courses/electives.html>

York University

<http://www.schulich.yorku.ca/ssb-xtra/mba.nsf/allwebdocuments/core+courses>

<http://www.schulich.yorku.ca/ssb-extra/mba.nsf/allwebdocuments/elective+courses>

Other Publications:

Access Economics Pty Limited,
The Australian Education Sector and the Economic Contribution of International Students (2009)
 East Melbourne, Australian Council for Private Education and Training.

Albrecht, W Steve and Sack, Robert J, *Accounting Education: Charting the Course through a Perilous Future* (2000) Sarasota, Florida, American Accounting Association.



7

Aspen Institute Center for Business Education, 2007–08 *Beyond Grey Pinstripes Global 100: Preparing MBAs for Social and Environmental Stewardship*: http://beyondgreypinstripes.org/rankings/bgp_2007_2008.pdf (30 January 2010) and other websites listed above under *Beyond Grey Pinstripes* above.

Australian Chamber of Commerce and Industry and Business Council of Australia, *Employability Skills for the Future* (2002) Canberra, Department of Education Science and Training.

Australian Education Council – Mayer Committee, *Key Competencies. Report of the Committee to Advise the Australian Education Council and Ministers of Vocational Education, Employment and Training on Employment-related Key Competencies for Postcompulsory Education and Training* (1992) Canberra, Australian Education Council and Ministers of Vocational Education, Employment, and Training.

Ballou, Brian and Heitger, Dan L, 'Integrating Governance Risk and Reporting to create Long-term Value', *Strategic Finance*, May, 2008, 38-41.

Bebbington, Jan, 'Engagement, Education and Sustainability: A Review Essay on Environmental Accounting' (1997) 10(3) *Accounting, Auditing & Accountability Journal* 365-81.

Bedford, Norton, Bartholomew, EE, Bowsher, Charles A, Brown, Abbott L, Davidson, Sidney, Horngren, Charles T, Knortz, Herbert C, Piser, M Mendel, Shenkir, William G, Simmons, John K, Summers, Edward L, and Wheeler, John T, 'Future Accounting Education: Preparing for the Expanding Profession – The American Accounting Association Committee on the Future Structure, Content and Scope of Accounting Education' (1986) 1(1) *Issues in Accounting Education* 168-95.

Bennett, Martin, Bouma, Jan Jaap, and Ciccozzi, Elena, 'An Institutional Perspective on the Transfer of Accounting Knowledge: a Case Study' (2004) 13(3) *Accounting Education* 329-46.

Birrell, Bob, *The Changing Face of the Accounting Profession in Australia, Report to CPA Australia*, (Melbourne: 2006).

Birrell, Bob and Rapson, V, *Migration and the Accounting Profession in Australia. , Report to CPA Australia*, (Melbourne: 2005).

Blazey, Patricia, Ashiabor, Hope, and Janu, Penelope, 'Stakeholder Expectations for Generic Skills in Accounting Graduates: Curriculum Mapping and Implications for Change' (2008) *Macquarie Law Working Paper 2008/13*, <http://ssrn.com/abstract=1123784> (14 July 2009)

Boyce, Gordon, 'Critical Accounting Education: Teaching and Learning Outside the Circle' (2004) 15 *Critical Perspectives on Accounting* 565-86.

Boyce, Gordon, Williams, Sarah, Kelly, Andrea, and Yee, Helen, 'Fostering Deep and Elaborative Learning and Generic (soft) Skill Development: the Strategic use of Case Studies in Accounting Education' (2001) 10(1) *Accounting Education* 37-60.

7 BIBLIOGRAPHY

- Clarke, Thomas and Klettner, Alice, *Corporate Social Responsibility and Sustainability: the New Business Imperatives? An International Comparison* (2007) Sydney, FINSIA.
- Commonwealth of Australia (2009) *Living Sustainably: The Australian Government's National Action Plan for Education for Sustainability*. <http://environment.gov.au/education/nap/index.html> (31 March 2010)
- Costanza, Robert and Patten, Bernard C., 'Commentary – Defining and Predicting Sustainability' (1995) 15(3) *Ecological Economics* 193-6.
- CPA Australia, *Submission to the Ministerial Discussion Paper: Higher Education at the Crossroads* (28 June, 2002).
- CPA Australia, 'Foreign student population in Australia almost one in five' (March, 2009) https://www.cpaaustralia.com.au/cps/rde/xchg/SID-3F57FECBC958787F/cpa/hs.xsl/1017_24197_ENA_HTML.htm (13 June 2009)
- Dovers, Stephen, *Environment and Sustainability Policy. Creation, Implementation, Evaluation* (2005) Annandale, The Federation Press.
- Econtech, *Tip of the Iceberg – the Economics of Sustainability Risk Reporting* (2007) Sydney, FINSIA.
- Freeman, Mark, Hancock, Phil, Simpson, Lyn, Sykes, Chris, Petocz, Peter, Densten, Iain, and Gibson, Kathy, *Business as Usual: A Collaborative and Inclusive Investigation of Existing Resources, Strengths, Gaps and Challenges to be Addressed for Sustainability in Teaching and Learning in Australian University Business Faculties, Report to The Carrick Institute for Learning and Teaching in Higher Education Ltd, an initiative of the Australian Government Department of Education, Employment and Workplace Relations*, (Sydney: 2008).
- Frost, Geoff, *Discussion Paper on ARC Linkage Research – Presentation Paper at CPA* 12 May (2009) Sydney.
- Frost, Geoff, Jones, Stewart, Loftus, Janice, and Van Der Laan, Sandra, 'A Survey of Sustainability Reporting Practices of Australian Reporting Entities' (2005) 15(1) *Australian Accounting Review* 89-96.
- Garnaut, Ross, *The Garnaut Climate Change Review: Final Report* (2008) Melbourne, New York, Cambridge University Press.
- Goldman, Gary and Carlyle, Blair, 'Continuous Disclosure: A Culture of Compliance' (2007) 59(2) *Keeping Good Companies* 94-7.
- Goldsworthy, Ashley, 'Developing Generic Skills: Examples of Best Practice', *B-HERT News*, Issue 16 – April, 2003.
- Gordon, Irene M, 'Commentary on: Some Thoughts on Social and Environmental Accounting Education' (2001) 10(4) *Accounting Education* 361-64.
- Gray, Rob, 'Thirty years of Social Accounting, Reporting and Auditing: What (if anything) Have we Learnt?' (2001) 10(1) *Business Ethics: A European Review* 9-15.
- Gray, Rob, *Of Messiness, Systems and Sustainability: Towards a more Social and Environmental Finance and Accounting – Working Paper 2002/6* (2002) Glasgow, Department of Accounting and Finance, University of Glasgow.
- Gray, Rob and Collison, David, 'Can't see the Wood for the Trees, Can't see the Trees for the Numbers? Accounting Education, Sustainability and the Public Interest' (2002) 13 *Critical Perspectives on Accounting* 797-836.
- Gray, Rob, Walters, Diane, Bebbington, Jan, and Thompson, Ian, 'The Greening of Enterprise: An Exploration of the (Non) Role of Environmental Accounting and Environmental Accountants in Organizational Change' (1995) 6 *Critical Perspectives on Accounting* 211-39.
- Griffiths, Emma, 'Business in the Dark about Emissions Trading', *The World Today: ABC Radio* (20 July 2009): <http://www.abc.net.au/news/stories/2009/07/20/2631035.htm>

- Hall, Greg and Hooper, Karen
Australia's Exports of Education Services: Reserve Bank of Australia http://www.rba.gov.au/PublicationsAndResearch/Bulletin/bu_jun08/aus_exports_education_services.html (15 May 2009).
- Hancock, Phil, 'Accounting Skills for Future Graduates in Australia: More than Numbers' in *Papers Presented at the University of South Australia Seminar Series* (Adelaide, 3 July 2009).
- Hancock, Phil, Howieson, Bryan, Kavanagh, Marie, Kent, Jenny, Tempone, Irene, and Segal, Naomi, *Accounting for the Future: More than Numbers: A Collaborative Investigation into the Changing Skill set for Professional Accounting Graduates over the next ten years and Strategies for Embedding such skills into Professional Accounting Programs Report to Australian Learning and Teaching Council, an initiative of the Australian Government Department of Education, Employment and Workplace Relations*, (Strawberry Hills: 2009).
- Hatfield-Dodds, Steve, Turner, Graham, Schandl, Heinz, and Doss, Tanjua, *Growing the Green Collar Economy: Skills and Labour Challenges in Reducing our Greenhouse Emissions and National Environmental Footprint*, Report to Dusseldorp Skills Forum, (CSIRO Sustainable Ecosystems, Canberra: 2008).
- Hazelton, James and Haigh, Matthew, 'Incorporating Sustainability into Accounting Curricula: Lessons Learnt From an Action Research Study' (2008) *Accounting Education* DOI: 10.1080/09639280802044451.
- Heal, Geoffrey, 'Markets and Sustainability', in Revesz, R, Sands, P, and Stewart, R (eds), *Environmental Law, the Economy and Sustainable Development* (2000) Cambridge, Cambridge University Press.
- Howieson, Bryan, 'Accounting Practice in the new Millennium: Is Accounting Education Ready to meet the Challenge?' (2003) 35 *The British Accounting Review* 69-103.
- Hunting, SA, Mah, J, and Tilbury, D, *Education About and For Sustainability in Australian Business Schools: Embedding Sustainability in MBA Programs, Report to Department of the Environment and Heritage*, (Sydney: 2006).
- Institute of Chartered Accountants, *Broad Based Business Reporting, the complete reporting tool* (2008) Sydney, Institute of Chartered Accountants
- Institute of Chartered Accountants in Australia and CPA Australia, *Professional Accreditation Guidelines for Higher Education Programs* (2009).
- Institute of Chartered Accountants in Australia, *Broader Entry into the Chartered Accountants Program*: <http://www.charteredaccountants.com.au/A117235857> (24 July 2009).
- Joseph, George, 'Mapping, Measurement and Alignment of Strategy using the Balanced Scorecard: The Tata Steel Case' (2009) 18(2) *Accounting Education* 117-30.
- Lamberton, Geoff, 'Sustainability Accounting – A Brief History and Conceptual Framework' (2005) 29 *Accounting Forum* 7-26.
- Macnaghten, Phil and Jacobs, Michael, 'Public Identification with Sustainable Development: Investigating Cultural Barriers to Participation' (1997) 7(1) *Global Environmental Change* 5-24.
- Malley, Alex, *President's desk: October 2008 Sustaining good business*: http://www.cpaaustralia.com.au/cps/rde/xchg/cpa/hs.xsl/724_30427_ENA_HTML.htm (12 February 2009).
- Mathews, MR, 'Twenty-five years of Social and Environmental Accounting Research. Is there a Silver Jubilee to Celebrate?' (1997) 10(4) *Accounting, Auditing & Accountability Journal* 481-531.
- Mathews, MR, 'The Way Forward for Accounting Education? A Comment on Albrecht and Sack "A Perilous Future"' (2001) 10(1) *Accounting Education* 117-22.
- Milne, Markus J, 'On Sustainability: the Environment and Management Accounting' (1996) 7 *Management Accounting Research* 135-61.

7 BIBLIOGRAPHY

- National Centre for Vocational Education Research Ltd, *Defining Generic Skills: At a Glance* (2003) Adelaide, Australian National Training Authority.
- Ngiam, John and Shying, Mark (eds), *Accounting Handbook* (2009) Melbourne, CPA Australia and Pearson Education Australia.
- Niculescu, Basarab *Manifesto of Transdisciplinarity* (Voss, Karen-Claire trans, 2002) New York, State University of New York Press.
- Pitman, Tim and Broomhall, Susan, 'Australian Universities, Generic skills and Lifelong Learning' (2009) 28(4) *International Journal of Lifelong Learning* 439-58.
- Prince's Accounting for Sustainability Project, *The Principles of The Accounting for Sustainability Forum* <http://www.accountingfor-sustainability.org/output/Page182.asp> (14 July 2009).
- Ratnatunga, J and S, Jones, 'An Inconvenient Truth about Accounting: The Paradigm Shift Required in Carbon Emissions Reporting and Assurance' in *Papers Presented at the American Accounting Association Annual Meeting – "Building our Accounting Community"* (Anaheim, 6 August 2008).
- Rich, Sara, 'Sustainability key to economic survival', *The Australian* (22 April 2009).
- Rout, Milanda, 'Free Degrees to Lure Accountants' (2007) *The Australian*, <http://www.theaustralian.news.com.au/story/0,25197,22129164-12332,00.html> (25 July 2009).
- Saravanamuthu, Kala and Tinker, Tony, 'The University in the New Corporate World' (2002) 13 *Critical Perspectives on Accounting* 545-54.
- Sibbel, Anne, 'Pathways towards Sustainability through Higher Education' (2009) 10(1) *International Journal of Sustainability in Higher Education* 68-82.
- Stevens, Glenn *The Australian Economy: Then and Now – Address to the Inaugural Faculty of Economics and Business Alumni Dinner, The University of Sydney, by the Governor of the Reserve Bank – 15 May 2008*: Reserve Bank of Australia http://www.rba.gov.au/Speeches/2008/sp_gov_150508.html (15 May 2009).
- Taylor Research and Consulting Group Inc., *Student & Academic Research Study: Final Quantitative Report* (2000) Jersey City, American Institute of Certified Public Accountants.
- Thomas, Janelle and Benn, Suzanne, *Education about and for Sustainability in Australian Business Schools: Stage 3 Report to Department of the Environment, Water, Heritage and the Arts prepared by the Australian Research Institute in Education for Sustainability*, (Sydney: 2009).
- Tilbury, D, Crawley, C, and Berry, F, *Education about and for Sustainability in Australian Business Schools: Report prepared by the Australian Research Institute in Education for Sustainability (ARIES) and Arup Sustainability* (2005) Canberra, Australian Government Department of the Environment and Heritage.
- Ullmann, Areih A, 'The Corporate Environmental Accounting System: A Management Tool for Fighting Environmental Degradation' (1976) 1(1) *Accounting, Organizations and Society* 71-79.
- Unerman, Jeffrey, 'Placing a Value on Sustainability' in *Papers Presented at the Accounting for Sustainability Forum* (London, 17 December 2008).
- United Nations, *Report of the United Nations Conference on Environment and Development* (Rio Declaration) (1992).
- United Nations Economic and Social Council, *Strategy for education for sustainable development – Addendum 1 Background*: <http://www.unece.org/env/documents/2004/cep/ac.13/cep.ac.13.2004.8.add.1.e.pdf>
- Willmott, Hugh, Puxty, Tony, and Sikka, Prem, 'Commentary: Losing One's Reason: On the Integrity of Accounting Academics' (1993) 6(2) *Accounting, Auditing and Accountability Journal* 98-110.
- World Commission on Environment and Development, *Our Common Future (The Brundtland Report)* (1987).



APPENDIX 1: QUESTIONNAIRE

Baseline assessment of sustainability content in Australian accounting courses

1. Management Accounting

Management accounting includes any courses relating to budgeting, product and service costing, control and performance evaluation and strategic management accounting.

A. Please indicate, by checking a box or boxes

(in accordance with instructions on page 2) whether any courses offered at any level within the framework of Management Accounting at your institution offer course content or training in skills relating to any subject matter described below:

- Accounting for externalities ☐
- Resource accounting ☐
- Accounting for environmental services ☐
- Product life cycle analysis ☐
- Waste reduction ☐
- Energy budgeting ☐
- Carbon use, carbon pollution, carbon offsets ☐
- Environmental footprinting ☐
- Environmental protection, detection and failure costs ☐
- Balanced scorecard ☐
- Total Quality Management ☐
- Future scenarios ☐
- Supply chain management ☐
- Strategic pro-activity ☐
- Green opportunities (employment and growth) ☐
- None of the above ☐

Please check all boxes that you believe to be covered by your courses. You may check more than one box.

- B. If there is subject matter addressed or taught which offers similar content or training in relevant skills, then (even if your answer was 'None of the above') please provide a **brief** subject description. If the subject matter is broadly **integrated** into course content, please provide a brief description of the **type of subject matter covered and how it is introduced** (e.g. lectures, assignments, exams, class or group exercises etc).

- C. If you have responded that some of the listed subject matter or similar or other relevant subject matter is addressed or taught **please indicate, by checking a box or boxes (in accordance with instructions on page 2)** whether the subject matter is taught at postgraduate level, graduate level, or at both graduate and postgraduate level (i.e. check both boxes). **You are not asked to identify particular courses or years.**

- Postgraduate ☐
- Graduate ☐



A

2. Financial Accounting

Financial accounting covers an understanding of business finance and treasury function, including fundamental capital, investment, funding and risk decision concepts.

A. Please indicate, by checking a box or boxes (in accordance with instructions on page 2) whether any courses offered at any level within the framework of Financial Accounting at your institution offer course content or training in skills relating to any subject matter described below:

- Carbon budgeting, investment in carbon markets ☐
- Environmental risk management ☐
- Emerging 'green' markets ☐
- Greenhouse accounting ☐
- Efficiency gains through environmental initiatives ☐
- Adaptive management ☐
- Accounting for externalities ☐
- Resource accounting ☐
- Accounting for environmental services ☐
- Product life cycle analysis ☐
- None of the above ☐

Please check all boxes that you believe to be covered by your course. You may check more than one box.

B. If there is subject matter addressed or taught which offers similar content or training in relevant skills, then (even if your answer was 'None of the above') please provide a brief subject description. If the subject matter is broadly integrated into course content, please provide a brief description of the type of subject matter covered and how it is introduced (e.g. lectures, assignments, exams, class or group exercises etc).

C. If you have responded that some of the listed subject matter or similar or other relevant subject matter is addressed or taught please indicate, by checking a box or boxes (in accordance with instructions on page 2) whether the subject matter is taught at postgraduate level, graduate level, or at both graduate and postgraduate level (i.e. check both boxes). You are not asked to identify particular courses or years.

- Postgraduate ☐
- Graduate ☐

APPENDIX 1: QUESTIONNAIRE

3. Auditing and Assurance

Auditing and assurance includes accountability of external auditors under statutory and professional requirements.

A. Please indicate, by checking a box or boxes (in accordance with instructions on page 2) whether any courses offered at any level within the framework of Auditing and Assurance at your institution offer course content or training in skills relating to any subject matter described below:

- Accounting for pollution, externalities and waste ☐
- Carbon accounting (offsets, savings and sequestration) ☐
- Global Reporting Initiative (GRI) accounting ☐
- Broad based business reporting ☐
- Connected reporting framework ☐
- ISO Standards accounting ☐
- AA1000 ☐
- Triple bottom line reporting ☐
- Ecological footprinting ☐
- Social auditing ☐
- Balanced scorecard ☐
- Sustainability assessment model ☐
- None of the above ☐

Please check all boxes that you believe to be covered by your course. You may check more than one box.

B. If there is subject matter addressed or taught which offers similar content or training in relevant skills, then (even if your answer was 'None of the above') please provide a **brief** subject description. If the subject matter is broadly **integrated** into course content, please provide a brief description of the **type of subject matter covered and how it is introduced** (e.g. lectures, assignments, exams, class or group exercises etc).

C. If you have responded that some of the listed subject matter or similar or other relevant subject matter is addressed or taught **please indicate, by checking a box or boxes (in accordance with instructions on page 2)** whether the subject matter is taught at postgraduate level, graduate level, or at both graduate and postgraduate level (i.e. check both boxes). **You are not asked to identify particular courses or years.**

- Postgraduate ☐
- Graduate ☐

4. Commercial and Corporation law

Commercial and Corporation Law covers general legal knowledge relating to the business environment including law relating to corporate entities.

A. Please indicate, by checking a box or boxes (in accordance with instructions on page 2) whether any courses offered at any level within the framework of Commercial and Corporation law at your institution offer course content or training in skills relating to any subject matter described below:

- Environmental risk assessment ☐
- Corporate environmental governance ☐
- Accounting for emission rights/trading schemes ☐
- Triple bottom line reporting ☐
- Social auditing ☐
- Balanced scorecard ☐
- Environmental responsibility/reporting ☐
- Global Reporting Initiative (GRI) ☐
- Voluntary public environmental Reporting ☐
- Regulatory measures including eco-taxes, subsidies and tradable permits ☐
- Acts relating to environmental reporting in the Australian context (e.g. relevant provisions of *Corporations Act 2001*, *Environmental Protection & Biodiversity Conservation Act 1999*, *Water Management Act 2000*, *Native Vegetation Act 2004*, *Environmental Planning & Assessment Act 1979*) ☐
- None of the above ☐

Please check all boxes that you believe to be covered by your course. You may check more than one box.

- B. If there is subject matter addressed or taught which offers similar content or training in relevant skills, then **(even if your answer was 'None of the above')** please provide a **brief** subject description. If the subject matter is broadly **integrated** into course content, please provide a brief description of the **type of subject matter covered and how it is introduced** (e.g. lectures, assignments, exams, class or group exercises etc).

- C. If you have responded that some of the listed subject matter or similar or other relevant subject matter is addressed or taught **please indicate, by checking a box or boxes (in accordance with instructions on page 2)** whether the subject matter is taught at postgraduate level, graduate level, or at both graduate and postgraduate level (i.e. check both boxes). **You are not asked to identify particular courses or years.**

- Postgraduate ☐
- Graduate ☐

5. Economics

Economics covers microeconomics and/or macroeconomics.

- A. **Please indicate, by checking a box or boxes (in accordance with instructions on page 2)** whether any courses offered at any level within the framework of Economics at your institution offer course content or training in skills relating to any subject matter described below:

- Scenario modeling ☐
- Resource efficiency ☐
- Life cycle analysis ☐
- Cost/benefit over time (action now vs. business as usual) ☐
- Sustainability performance ☐
- Environmental risk assessment ☐
- Water usage and energy efficiency ☐
- Full cost reporting (internal / external) ☐
- Emerging environmental markets ☐
- Extension of 'cap and trade' schemes to include other resources ☐
- None of the above ☐

Please check all boxes that you believe to be covered by your course. You may check more than one box.

- B. If there is subject matter addressed or taught which offers similar content or training in relevant skills, then **(even if your answer was 'None of the above')** please provide a **brief** subject description. If the subject matter is broadly **integrated** into course content, please provide a brief description of the **type of subject matter covered and how it is introduced** (e.g. lectures, assignments, exams, class or group exercises etc).

APPENDIX 1: QUESTIONNAIRE

- C. If you have responded that some of the listed subject matter or similar or other relevant subject matter is addressed or taught **please indicate, by checking a box or boxes (in accordance with instructions on page 2)** whether the subject matter is taught at postgraduate level, graduate level, or at both graduate and postgraduate level (i.e. check both boxes). **You are not asked to identify particular courses or years.**

- Postgraduate ☐
- Graduate ☐

6. Ethics

Ethics is considered an important element in the development of accounting and business professionals.

- A. **Please indicate, by checking a box or boxes (in accordance with instructions on page 2)** whether any courses offered at any level within the framework of Economics at your institution offer course content or training in skills relating to any subject matter described below:

- Integration of economic and environmental considerations in decision-making ☐
- The precautionary principle ☐
- Inter-generational equity ☐
- Conservation of biological diversity ☐
- Inclusion of environmental factors in the valuation of assets/services ☐
- Polluter pays principles ☐
- Stakeholder engagement ☐
- Full life cycle valuation of costs of providing goods and services ☐
- Critical natural capital ☐
- Social and environmental responsibility ☐
- Integration of intangible assets/ways to qualitatively measure these ☐
- Challenging the business time horizon ☐
- Future directions for corporate sustainability ☐
- Coping with information in areas of risk and uncertainty ☐
- Control of executive remuneration ☐
- None of the above ☐

Please check all boxes that you believe to be covered by your course. You may check more than one box.

- B. If there is subject matter addressed or taught which offers similar content or training in relevant skills, then **(even if your answer was 'None of the above')** please provide a **brief** subject description. If the subject matter is broadly **integrated** into course content, please provide a brief description of the **type of subject matter covered and how it is introduced** (e.g. lectures, assignments, exams, class or group exercises etc).

- C. If you have responded that some of the listed subject matter or similar or other relevant subject matter is addressed or taught **please indicate, by checking a box or boxes (in accordance with instructions on page 2)** whether the subject matter is taught at postgraduate level, graduate level, or at both graduate and postgraduate level (i.e. check both boxes). **You are not asked to identify particular courses or years.**

- Postgraduate ☐
- Graduate ☐

7. Additional Teaching

Do you have any additional courses, units or modules that deal with 'Accounting for Sustainability'? Only include those modules that have not been dealt with above. Please provide a **brief** description indicating the nature of the course (e.g. diploma, certificate, graduate or postgraduate courses/units or modules).

Appendix 2: Participants at roundtable

Participants at the Accounting Roundtable November 2009

Opening:	<ul style="list-style-type: none"> Professor Judyth Sachs Deputy Vice-Chancellor (Provost), Macquarie University
Chair:	<ul style="list-style-type: none"> Professor Mark Gabbott Executive Dean Faculty of Business and Economics, Macquarie University
CPA Australia:	<ul style="list-style-type: none"> John Purcell Policy Adviser on Corporate Regulation, Professional Standards, Member Knowledge Margaret McKerchar NSW President CPA, University of NSW
Australian Institute of Company Directors:	<ul style="list-style-type: none"> Leah Watterson Senior Policy Adviser
Financial Services Institute of Australasia:	<ul style="list-style-type: none"> Martin Fahy Chief Executive
Australian Accounting Standards Board/Financial Reporting Council:	<ul style="list-style-type: none"> Kevin Stevenson Chair of AASB, PricewaterhouseCoopers, International Accounting Standards Board, University of Queensland, Monash University
Ernst & Young:	<ul style="list-style-type: none"> Trent Van Veen
Council of Environment Business:	<ul style="list-style-type: none"> Andrew Petersen PricewaterhouseCoopers, AICD
St James Ethics Centre:	<ul style="list-style-type: none"> Rosemary Sainty Head Responsible Business and CR Leaders Project and UN Global Compact Focal Point for Australia
Macquarie University:	<ul style="list-style-type: none"> Assoc Professor Lorne Cummings Assoc Professor Stephen Chen James Keene
University of Technology, Sydney:	<ul style="list-style-type: none"> Patrick Woods Deputy Vice Chancellor Emeritus Professor Dexter Dunphy Professor Thomas Clarke
Professions Australia:	<ul style="list-style-type: none"> Malcolm Farrow
Department of Education Employment & Workplace Relations:	<ul style="list-style-type: none"> Camille Carroll
Westpac:	<ul style="list-style-type: none"> Sondra Cortis Head of Finance, Regional Banking, Westpac Retail and Business Bank Neil Owen Senior Manager, Financial Business Systems
Universities Australia:	<ul style="list-style-type: none"> Alex Maroya
ARIES:	<ul style="list-style-type: none"> Professor Suzanne Benn Director ARIES Andrew Martin
BHERT:	<ul style="list-style-type: none"> Sharon Winocur

APPENDIX 3: AGENDA FOR ROUNDTABLE DISCUSSIONS

Appendix 3: Agenda for roundtable discussions

AGENDA

1 pm: *LIGHT LUNCH*

2 pm:

1. Opening by the Deputy Vice-Chancellor – Provost, Macquarie University:

2. Opening discussion (generalities):

- What is your organisation doing about sustainability challenges and preparations for a 'post-carbon economy'?
- What problems have arisen?
- What do you see as future challenges?
- How are you planning for future challenges in accounting, accountability, assurance?
- Do you see a role for accountants/the professional associations/ the universities/government in the carbon economy? If so, what is that role?

3. Second tier (specifics):

- What do you see as needed:
 - from the profession?
 - from the universities?
 - from government?
 - from business?
 - in data systems development/reporting systems development or modification?
in research and development?
 - in policy, guidelines and regulation?
 - in the form of knowledge and skills development, teaching resources/curriculum change?
- What form of ongoing association is appropriate to further improvements in regard to identified issues? (What would it cost and who will pay for it?).

AFTERNOON TEA

4. Closing Session: Suggestions and agenda items from the Roundtable participants

APPENDIX 4: OVERSEAS STUDENT PARTICIPATION



Appendix 4: Overseas student participation

TABLE A: OVERSEAS ACCOUNTING STUDENTS BY REGION, 1991–2000⁹⁵

Year	Total Accounting Students	Offshore Accounting Students	Offshore Students as % of Total	Overseas Accounting Students	Overseas Students as % of Total
1991	20106	388	1.93	2980	14.82
1992	19676	495	2.52	3085	15.68
1993	18943	521	2.75	2789	14.72
1994	19136	668	3.49	3129	16.35
1995	20379	797	3.91	3519	17.27
1996	22280	851	3.82	4886	21.93
1997	24545	1259	5.13	6005	24.47
1998	25018	1504	6.01	6442	25.75
1999	25556	1870	7.32	6842	26.77
2000	26178	1955	7.47	7823	29.88

Source: DETYA, Students, Selected Higher Education Statistics, 1991–2000

TABLE B: OVERSEAS TERTIARY STUDENTS BY REGION, 2006⁹⁶

Student source region by country of study	Australia	France	Germany	UK	USA	World
Arab States	1.8	30.0	6.4	4.4	2.8	6.9
Central and Eastern Europe	1.1	9.0	40.8	4.8	6.4	12.1
Europe Central Asia	0.1	0.7	2.9	0.3	0.6	3.3
East Asia and the Pacific	59.0	11.7	16.4	29.3	41.8	29.4
Latin America and the Caribbean	1.2	4.4	3.0	2.6	11.5	5.6
North America and Western Europe	11.0	14.5	20.2	37.0	13.9	17.8
South and West Asia	15.4	1.2	4.5	10.6	17.0	8.4
Sub-Saharan Africa	3.5	18.5	4.0	8.4	5.7	7.5
Unspecified	7.0	10.0	1.8	2.5	0.2	9.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

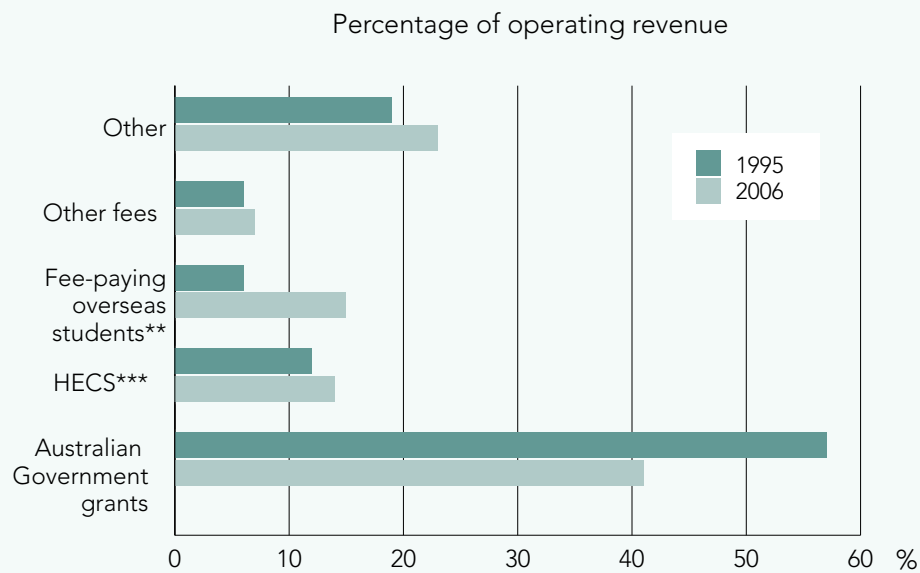
Source: UNESCO Institute of Statistics

⁹⁵ CPA Australia, 'Foreign student population in Australia almost one in five' (2002)
https://www.cpaaustralia.com.au/cps/rde/xchg/SID-57FECBC958787F/cpa/hs.xsl/1017_24197_ENA_HTML.htm (13 June 2009).

⁹⁶ Access Economics Pty Limited, *The Australian Education Sector and the Economic Contribution of International Students* (2009), pp. i-iii.

APPENDIX 4: OVERSEAS STUDENT PARTICIPATION

FIGURE 1: AUSTRALIAN UNIVERSITY REVENUE 1995–2006*



* Includes some revenue from vocational education

** May include revenue from students studying at offshore campuses

*** Higher Education Contribution Scheme

Source: Department of Education, Employment and Workplace Relations
(Hall and Hooper, 2008)





Printed on 50% recycled and 50% FSC certified paper.

Copyright

© Commonwealth of Australia 2010

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, all other rights are reserved. Information contained in the publication may be copied or reproduced for study, research, information or non-commercial educational purposes, provided the source is fully acknowledged.

Citation

Martin A and Steele F (2010), *Sustainability in Key Professions: Accounting*. A Report prepared by the Australian Research Institute in Education for Sustainability for the Australian Government Department of the Environment, Water, Heritage and the Arts.

ISBN: 978-1-74138-356-0

Disclaimer

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of the Australian Government or the Minister for the Environment, Heritage and the Arts or the Minister for Climate Change and Water.

While reasonable efforts have been made to ensure that the contents of this publication are factually correct, the Commonwealth does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this publication.



Australian Government
Department of the Environment,
Water, Heritage and the Arts



**MACQUARIE
UNIVERSITY**
SYDNEY ~ AUSTRALIA

