THE PROFESSIONAL ACCOUNTANCY BODIES AND
THE PROVISION OF EDUCATION AND TRAINING IN
RELATION TO ENVIRONMENTAL ISSUES

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Published by
The Institute of Chartered Accountants of Scotland
CA House, 21 Haymarket Yards, Edinburgh EH12 5BH
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The Research Committee is grateful to all those who participate in the refereeing process.
CONTENTS

Foreword ........................................................................................................ i
Acknowledgments .................................................................................... iii
Executive Summary .................................................................................. v

1. INTRODUCTION AND OUTLINE OF THE ISSUES .............................. 1
   The research question(s) ........................................................................ 2
   Approach to the project ......................................................................... 5
   Research approach employed ............................................................. 7
   Structure of the report .......................................................................... 15

2. BACKGROUND: ACCOUNTING, THE ENVIRONMENT AND
   SUSTAINABILITY ............................................................................. 17
   Environmental issues ............................................................................. 18
   Accounting and the environment ......................................................... 23
   Sustainability and accounting ............................................................. 29
   Conclusions .......................................................................................... 32

3. ENVIRONMENTAL ISSUES AND EDUCATION ................................. 35
   Purpose of education ............................................................................ 37
   Education, the environment and sustainability .................................... 41
   Response of the professions ............................................................... 44
   Talking with other educators ............................................................... 47
   A closer look at management and business studies ......................... 53
   Conclusions .......................................................................................... 56

4. ACCOUNTING EDUCATION IN THE UNIVERSITIES: THE PROBLEMS
   AND ISSUES ...................................................................................... 61
   State of accounting education ............................................................. 62
   Accounting education change and the AECC ..................................... 69
   What is the ‘problem’ in accounting education? ............................... 71
   Environmental accounting in the universities ..................................... 73
   Conclusions .......................................................................................... 76
Contents

5. Environmental Accounting in UK Universities:
   Departments, Teachers and Students ........................................ 81
   Current state of environmental accounting teaching in
   UK universities .................................................................. 82
   Why do students study/not study environmental and social
   accounting? ........................................................................ 89
   Talking with senior accounting academics ......................... 95
   Conclusions ...................................................................... 100

6. Environmental Issues, the Profession and Practitioners
   105
   Structure of the accountancy profession ............................. 107
   Academic-practitioner relationship .................................... 109
   Accreditation of accounting degrees .................................. 111
   Professional examinations and syllabi ............................... 114
   Accounting and the public interest .................................... 115
   Environmental issues in the profession .............................. 117
   Conclusions ..................................................................... 120

7. Views from the Profession: Recruitment, Practitioners
   and the Professional Bodies .................................................. 125
   Recruitment: what firms are looking for ............................ 127
   Practitioners, opinion formers and the professional bodies .... 133
   Conclusions ..................................................................... 144

8. Looking to the Future: Synthesis, Conclusions and
   Recommendations .................................................................. 149
   Overview of conclusions .................................................... 151
   Public interest and the wider picture .................................. 153
   Initial conclusions and recommendations ......................... 156
   Delivery of education and training ..................................... 161
   Re-examining the relevant degree ...................................... 162
   Leadership from the professional bodies ............................ 163
   Conclusions ..................................................................... 165
CONTENTS

ADDENDUM TO CHAPTER 8: DEVELOPING THE INTERMEDIATE RECOMMENDATIONS .......................................................... 167

REFERENCES AND BIBLIOGRAPHY ............................................. 179

APPENDIX: RESEARCH INSTRUMENTS EMPLOYED ...................... 199
Over the past fifty years all developed nations have come to recognise the central part that business plays in making each national economy grow. As a consequence, those in the accounting profession who have focused on the measurement and reporting of business activity using financial and economic indicators, to enhance the efficiency of decision making, have found the importance of their role increasingly accepted and valued within society. In short, accountancy is not seen as scorekeeping any longer.

Yet whilst these changes have occurred there has been a growing political sense of unease that more and more of the decision making of which people are aware is based on economic considerations, which are themselves subject to the influences of global markets. At a deep level everyone knows that there is more to life than money and thinking people increasingly yearn for a framework to be used in decision making locally and internationally which takes into account the wider non-financial issues. Yet there are no easy answers here, not least because there is no agreed holistic view of life, nor is there consensus as to the interplay between economic activity and social or environmental issues.

Indeed in the environmental area, the strength of world-wide feeling released by the USA’s failure to endorse the Kyoto agreement illustrates clearly the absence of an agreed framework for decision making. So it is not open to anyone involved in providing the information that the community needs to allocate and manage resources to ignore this wider dilemma, and that certainly includes accountants.

The Institute of Chartered Accountants of Scotland (“ICAS”) has long recognised the limitations of a purely financial framework for accounting and decision making and has contributed in many ways,
including publishing guidance on non-financial measurement. In commissioning the research that led to this research report we wanted to build on some profound challenges raised originally by the ICAS Environmental Issues Working Party. In publishing the results we welcome the quality of ideas and the depth of challenge to current thinking that has thus been stimulated. The report does not claim to have the answers, but it certainly raises fundamental questions that need to be addressed before the answers to the wider dilemma can emerge, and we hope that it will take the debate forward.

Nigel Macdonald
Convener
Research Committee

September 2001
ACKNOWLEDGMENTS

We wish to thank the Research Committee and the Environmental Issues Working Party of The Institute of Chartered Accountants of Scotland for their support and sponsorship of this project. We would like to make particular mention of Professor Vivien Beattie, Ann Lamb, Rick Clark and Bob Lyon in this regard.

A number of people have undertaken pieces of work either directly on, or related to the project. Our considerable thanks go to Javad Mohamed, Donald Sinclair and Robert Williams in this regard.

The breadth of this report and the range of empirical work from which it draws was so extensive that it is not possible to name all who helped with advice, information, or conversations, or who agreed to be interviewed and/or complete questionnaires. Indeed, some would prefer to remain anonymous. We would, however, like to make especial mention of Roger Adams, Phil Armitage, Brian Baxter, Jane Broadbent, Nola Buhr, John Collier, Tony Dart, Stan Davies, Ken Gill, James Haslam, Mitchell Hogg, Martin Houldin, Robert Langford, Richard Laughlin, Julie Lockhart, Reg Mathews, David Owen, Catriona Paisey, Ian Percy, Johan Piet, Fiona Raitt, Colin Reid, Saskia Slomp, David Wheeler, Pat Wouters, Suzanne Zeedyk and all those practitioners, recruiters, students, academics and members of the professional institutes who we have not mentioned by name but who so generously gave of their time to give us advice, discuss issues with us, complete questionnaires and to answer our questions.

Last, but by no means least, we would like to make especial mention of Jan Bebbington. Her work has been highly influential on both our thinking and the structure of this report and she has commented on - and contributed extensively to - the whole project.
The Research Committee is particularly grateful to the Trustees of the Scottish Chartered Accountants’ Trust for Education who gave financial support for this project.
EXECUTIVE SUMMARY

Introduction

The 1990s witnessed a considerable change in awareness of - and attitudes to - environmental issues. The growing body of evidence about the declining state of the natural environment and the increasingly persuasive activities of, in particular, the United Nations stimulated widespread response. Diverse organisations and institutions including governments, regulatory bodies, companies and professional bodies – and not least the accounting profession – began to give serious attention to how they might best address this area of new and pressing concern. The decade saw major developments in, for example, the regulatory regime, corporate innovation and the emergence of new functional specialisms such as environmental management. Yet there remains a substantial concern that the responses to this growing environmental crisis have not been sufficiently widespread and comprehensive and have frequently failed to penetrate to the heart of organisational, governmental or civil activity.

In essence, two key questions continued to exercise commentators. The first of these was driven by pragmatic concerns: was enough being done to help organisations reduce their environmental impact in the interests of efficiency, innovation, risk reduction and social acceptability? The second question derived from a more long term and moral orientation: that is, is the environmental crisis a challenge to many of the fundamental tenets of economic and financial organisation – will protecting and restoring the natural environment be possible without deep structural change?

Each of these questions has fundamental implications for the professions. That is, on the one hand, we need to ask to what extent the professions are successfully acting to serve their clients’ needs in
this changing and demanding environment whilst addressing how their profession might best address the longer-term moral, public interest and sustainability questions that the environmental crisis raises. Despite significant strides in some areas, it is clear that a great deal more needs to be done. But such a conclusion raised the more fundamental question of whether the professions were currently equipped to address such questions. It is this concern that naturally leads to a need to examine the education and training within the professions.

The publication of the UK’s *Toyne Report* in 1993 was an early recognition of the importance of professional education and training – especially that undertaken in the universities - in the formulation of any substantial and worthwhile response to the environmental crisis. That report recommended the integration of a range of environmental issues throughout all university curricula. In 1998, the UK Government sponsored the *HE21* project with Forum for the Future to investigate and encourage this process throughout the professions. A key finding of both projects was that far too little was being done in these areas and where environmental education occurred at all it tended to be isolated from the core of the discipline.

Such observations and initiatives suggest that any responsible profession will begin the process of making a root and branch analysis of the way in which its education and training procedures need to change in order to fulfill the expectations of its members and the demands of *Toyne* and *HE21*. The accounting profession is certainly no exception to this and it is in this context that this research report has been produced.

**What do accountants need to know about the environment?**

Whilst there may well be some broad-brush consensus that accountants need to give attention to the environment, it is another matter altogether to translate this into specific ideas about what accountants need to know and how this knowledge and related skills
can be acquired. Central to such a consideration are three fundamental – and very demanding – questions. These are:

- do we consider the “environment” as requiring only marginal changes to our ways of economic and financial organisation or are we to consider the profound and fundamental challenge of “sustainability”?
- is university education primarily intended to prepare students for employment or is it about developing independent, critical minds for the broader good of society – and what, if any, conflict exists between these two aims? and
- is accounting a profession that ultimately seeks to serve its clients or one that seeks to serve the public interest – and is there any conflict between these two?

It is the answers to these questions which determine one’s answer to What do accountants need to know about the environment? This project was designed in explicit recognition of the complexity of these questions and was consequently structured in a manner which, we believed, would cast as much light on these questions as possible.

Consequently, our research approach was designed to give as broad a coverage as possible and employed (principally) a wide range of literature and research reviews, interviews and questionnaire surveys. These interviews and questionnaires sampled the views of: accounting educators; non-accounting educators; recruitment officers in firms of accountants; senior members of the profession - including representatives of the professional bodies; other “opinion formers”; and accounting undergraduate students.

**Broad findings**

Our initial review of the literature finds that research over the last two decades has painted a somewhat unflattering picture of accounting education and practice. Research into accounting education has suggested that it is typified by a reluctance to stray far from the current
norms of what constitutes “accounting” and has probably failed to enable students to reach their full ethical and intellectual potential. At the same time, practitioners have expressed concerns that accounting graduates are insufficiently prepared for their future employment. Accounting practice, on the other hand, has frequently been shown by research to be reluctant to innovate and, it would seem, unable to respond in a sufficiently positive manner to the needs of clients and employers. These concerns apply as much to environmental issues as to any other.

It, therefore, seemed appropriate to see if much could be learnt from the educational experiences of other professions. Many other professions – notably law, engineering and management – have functional specialist areas concerned with the environment. In these specialist areas there has been considerable development in response to the growing environmental agenda. However, this response does not appear to have spread to other areas of those disciplines – except where teachers are themselves committed to the area. Apparently, the non-specialists do not see why environmental issues should be prioritised over any other emerging issue and, seeing the development of the specialisms of environmental law, environmental management and environmental design, tend to assume, it would seem, that any environmental exigencies are being adequately dealt with. In particular, despite concerted attempts by influential bodies to encourage all management teachers to weave environmental concerns into their courses, progress has been woefully slow.

Our findings suggest that the situation in accounting education is more similar to that obtaining in other disciplines than might have been expected. Within the higher education sector, the increasing pressures on staffing and performance measurement have reduced, even further, an already low inclination to innovate. As with other disciplines, there is a self-imposed tendency to ‘stick to the knitting’ and a reluctance to stray outside what has been conventionally taught in the discipline. There is little direct impediment to any teacher wishing to develop environmental issues within their teaching but it takes a lot of enthusiasm to make it happen. And even amongst those with a leaning
towards a more critical appraisal in accounting education, there remains the dominant question of *why prioritise environmental issues?* Despite a significant rise in awareness of environmental (and social) issues in the last few years, this situation has hardly changed at all. The *Toyne Report* has had at least as minimal effect in accounting as it has had in other professional disciplines.

It appears to be the case that the majority of accounting undergraduates who study environmental (and social) accounting find the experience enjoyable and stimulating. It captures and develops their enthusiasm. But only a minority of undergraduates choose to study the subject. There are many possible reasons for this but the lack of apparent career relevance in the subject seems to be the dominant reason. More particularly, it seems that all undergraduate accounting students generally choose their optional courses for exactly the same reasons – stimulation, enjoyment, interest and so on. However, the students who choose to study environmental and social accounting tend to relate those characteristics (enjoyment, interest, *etc*) to their own personal views of the world – to their ‘self-actualisation’ if you will. In contrast, students who choose more conventionally career-orientated options do so because those characteristics (*enjoyment, etc*) are linked to how they see their career progressing. The bulk of accounting students are very strongly career orientated and identify themselves by reference to their perceptions of themselves in their future careers. It is the minority of students who find – or are aware of – conflict between their personal values and those presented as the (implicit) values of the profession. This is one of our novel findings that we believe deserves further investigation. It certainly appears to be the case that, until the profession places a much bigger emphasis on environmental issues (and, indeed, on related matters such as social responsibility), the majority of accounting students will have little or no interest in such matters.

To a large extent, accounting students have an accurate (if somewhat naive) perception of what the profession wants from them. That is, the profession, the recruiters and the professional bodies are largely
indifferent to the environment and its importance to accounting. Certainly they see no reason to prioritise it over other, more immediately pressing, issues. Although views were diverse, there was a substantial majority of practitioners for whom environmental issues are really quite irrelevant. This view went alongside a widespread opinion that accounting graduates, by virtue of being accounting graduates, had nothing to offer either the profession or future employers. There is still a very substantial majority of UK accountants who can see little or no value in any education in accounting, in any knowledge of accounting theory or any development of a real critical understanding of accounting. In this, accounting – and, especially British accounting (with the notable exception of ICAS with its continued commitment to relevant graduates) – is continuing on its path towards being one of the very few “professions” (accounting or otherwise) which has no substantial and shared educational – as opposed to training - basis for its members.

Broad conclusions

Central to the research we undertook, are the three key questions we raised earlier. First, our investigations (largely) confirm that there is very little understanding of sustainability and its implications amongst accountants. Equally, it is relatively easy to see why so many organisations do not look to their accountants when they need innovative environmental information systems or independent attestation of social or environmental reports. Second, whilst we are no clearer on what practitioners (and indeed students) see as the purpose of education, it is quite clear that all parties predominantly see accounting education as – at best - a training for employment and – at worst – irrelevant. This we find to be a truly worrying situation for such a talented and influential profession to find itself in. Third, it seems entirely clear that most members of the profession – teachers, students, practitioners – see accounting as entirely driven by clients’ needs and thus as having no independent life or values of its own. Despite a very wide-ranging research process we are still no clearer about how accounting can be so
focused and yet still claim to be serving the public interest – unless the most restrictive of meanings is attributed to that phrase. On the matter of the public interest our contentions are simple: the profession needs to be able to demonstrate that it is serving the public interest; and complicity in environmental degradation is not in the public interest. This contention remains through the report.

Central to the report are a number of unresolved issues that, in our judgment go some significant way to preventing a more rigorous and consequential discussion of the place of environmental issues within the accounting profession. These unresolved issues obviously include our perceptions as to whether or not the environment is in crisis, how fundamental a change may be needed to avert that crisis and the extent to which business and accounting are complicit in the crisis. More fundamentally, it is our conclusion that rigorous debate on this – as on other significant matters facing the profession – will founder, more often than not, over conceptions of education versus training and over whether or not the profession can be demonstrated to be serving the (or ‘a’) public interest.

On the matter of education versus training we should emphasise that, throughout the report, we are drawing a distinction between education and training. Crudely, we see education (primarily the development of independent critical thinking) as that which happens (or should happen) in the universities and training (primarily the inculcation in relevant knowledge and skills) as that which happens both ‘on the job’ and in the professional examinations. There is, inevitably, overlap between the two. But, we maintain, there is also a potential tension – as well as potential synergy – between the two. Key to this report is a recognition of – if not agreement with – this distinction.

If broad consensus is what is required, then for most of our respondents, the current situation is largely ideal. Very little – on the environment, on education or in the nature of the profession - is changing or should change.
Unfortunately, this present situation cannot (and most probably, should not) – on both moral and pragmatic grounds – be allowed to continue. A profession which cannot demonstrate that it serves the public interest is, by definition, risking its professional status and an education system which is disliked by practitioners and cannot, apparently, produce independent critical thinking individuals is not really an educational system at all. In addition, the failure to address the critical demands of sustainability currently threatens the lives of millions as the environmental and social situation of the planet is worsening by the day – regardless of your point of view on the matter.

It is well-established that the costs of social and environmental “externalities” are not captured by either conventional accounting measurement or the conventional measurement of national income. The costs of these externalities is the slow but quickening destruction of our natural heritage. To incorporate such costs into conventional business decisions will require not only changes in accounting techniques of recognition and measurement but also changes in social awareness and political will. However, as long as the “language of business” remains deeply and fatally flawed (from such a social and environmental perspective) then the accounting profession – as the trustee of that language – is complicit in preserving a relationship between our planet and humanity which is no longer tenable. The solutions are clearly not entirely the responsibility of the accounting profession – but neither are we entirely absolved from all responsibility in this matter.

Fortunately, a minority of teachers, practitioners, professional bodies and recruiters know this and want to see change. The first requirement for change is that members of the profession begin to understand the issues and that, in turn, requires a change in both educational practice and educational policy.

One of our primary purposes in writing this research report has been to stimulate debate and awareness. Whilst practicalities are discussed in the report, we see it as at least as important to try to influence the climate within which the issues are discussed. As a practically-focused profession,
accounting is frequently accused of focusing upon techniques and detail at the cost of recognising the context within which the techniques are used – and the underlying assumptions upon which the techniques are based. It is axiomatic in this report that such techniques are never neutral, indeed, can never be neutral.

Equally, it is axiomatic that research, however rigorous and however scientific it might seem, is never value free – and nor can it be. Consequently, the report is written in a manner which makes explicit the values embedded in the research in light of the fact that the research and conclusions could never be value free, no matter how apparently ‘scientific’ we might have chosen to make them. It is the worse kind of conceit to present as ‘neutral’ that which is profoundly biased.

Recommendations

The research concludes that changing the present situation will be difficult and, indeed, exceptionally unpopular in the short term. Therefore, the recommendations are made in three stages: immediate issues; client-serving issues; and sustainability issues. (In this executive summary, the recommendations are given in a broad overview. Specific and detailed recommendations – including considerations for the professional examination syllabi – are given in chapter eight of the report.)

Immediate issues

At the present moment, there are changes afoot within the profession, within clients and within the law. Standards and guidelines are starting to acknowledge environmental issues, company law is beginning to consider how to respond to environmental and social requirements, professional examination syllabi are acknowledging the issues. These developments should be encouraged. But this is not sufficient.
Client-serving issues

The second, medium-term stage is to fully explore those ways in which accounting can fulfil its duties to both its clients and its professional status. Such a change can only come through professional examinations, professional pronouncements, in-house courses and CPD – and this will be difficult as the professional syllabi are already too crowded. Each of these aspects of the accountants’ training must have environmental issues woven into them alongside a recognition of social responsibility issues and a more questioning approach to taken-for-granted matters. Capital expenditure decisions, initiative systems design, auditing and so on, must all have an explicit element that recognises the ‘win-win’ situations inherent in them. That is, clients can be helped to exploit energy efficiencies; clients can be helped to avoid environmental risks; accountants can support clients who wish to take steps to be less socially exposed; auditors can win back some of the attestation functions currently undertaken by consultants and avoid the embarrassingly poor quality that passes for attestation on current environmental and social reports. But this will not be enough either.

Sustainability issues

There is a need for a fundamental re-appraisal of how accounting as the “language of business” not only accommodates social and environmental as well as economic issues but, even perhaps, significantly changes to better reflect the social and environmental exigencies of sustainability. Techniques must be seen, emphatically, as means, not ends and, in our view, the profession must learn to continually question both the standard procedures and, at least as important, the ends that those procedures are designed to serve. Universities must stop trying to ape the professional examinations whilst the professional bodies and practitioners must wake up to the indefensibility of a “profession” dominated by people who have never studied (as opposed to learnt about) accounting. Only in this situation will there be the opportunity for universities to explore with tomorrow’s new professional entrants, the real demands of sustainability, the environment and social responsibility.
Only when the brightest of those young minds are working, critically and independently, towards the accounting professions’ contribution to addressing global crisis is there any hope for the profession to serve the public interest and play a major part in helping society towards the road of a just and efficient sustainability.
With the steady growth in the awareness of – and importance attached to – environmental issues during the 1990s, it was inevitable that attention would turn to educational processes and how these could contribute to changes in both environmental attitudes and environmental stewardship. One major source of impetus for educators, professionals and other groupings to start to give serious attention to the place of environmental issues in education and training was the recognition, throughout all organisations, that few functional activities could afford – for economic or moral reasons – to ignore environmental issues. Such an awareness led, in turn, to a recognition that new entrants to the workplace (in particular) required some significant environmental awareness. This awareness could, most obviously, be supplied through the education and training system. To this general concern, two specific initiatives in the UK brought matters into focus. The first of these was *The Toyne Report* (DfE, 1993) which sought to encourage universities (in particular) to integrate environmental issues throughout all subject curricula. More recently, the UK government has sponsored the HE21 project with Forum for the Future (Forum for the Future, 1999) to investigate and encourage the integration of environmental issues into the heart of professional education and training. (See Chapter 3 for more detail on these initiatives).

In such a climate, it is highly appropriate for all professional bodies and institutions to start the process of examining how environmental matters might most efficiently and effectively be embedded into their educational and training structures. It is in this context that the ICAS Environmental Issues Working Party commissioned this report.

In broad terms this report has four aims:
to review the current state of environmental education and training in accounting and other disciplines;
• to identify reasons for this current state of play;
• to explore the degree to which environmental issues need to be incorporated into accounting education and training; and
• to suggest ways in which improvements to the present situation might be made.

These four aims proved to be a great deal more demanding that we had initially thought. What started off looking like a simple question became, on further examination, a series of increasingly complex questions. This then led to a recognition that not only were there a range of groups whose views would be of value to us – academics, students, recruiters, firms, the professional bodies etc – but that these groups were far from homogeneous in their views and experiences. The problem we then faced became how to articulate such a range of views across such a range of complex issues in a single report without simplifying the world too far and ignoring important – if awkward – points of view. The purpose of this chapter is, therefore, to review – and seek to justify - the way in which the project was conceived and undertaken.

The research question(s)

The central question underlying the title of this project was *What do accountants need to know about the environment?* Once an answer could be found to this question, a subsidiary question then had to be addressed: *How are accountants to acquire this environmental knowledge and/or appropriate environmentally-related skills?*. On the face of it, the first question is relatively straightforward. Prior work has given us a fairly reasonable idea about the steps accountants are (or are not) taking to incorporate environmental issues into their work, (Bebbington et al, 1994; Gray et al, 1993; 1995; 1998; Collison, 1996). Employing the fashionable notion of “expectation gaps”, a detailed survey could provide relatively compelling evidence on where accountants find gaps
in their expertise and knowledge and on where clients and employers find accountants are insufficiently aware of environmental matters as they pertain to the accountants’ areas of expertise. Such a “revealed preference” analysis would produce an expectations gap that we could then codify and seek to remedy.

But such an approach would be predicated on one major assumption: namely that such revealed preferences are the only ones that matter. This, in turn, assumes two things: that the role of the accountant is to be entirely determined by the views of clients and employers and that the only “environmental issues” of any consequence are those which are revealed through current client/employer practice. If we could make such assumptions, then our initial task in this project is a relatively straightforward one.

If, however, we address “environmental issues” through the lens of sustainability (see Chapter 2) and consider that accountants are a profession whose duty is wider than serving clients, (ie it is to serve the public interest), then the task we have been set suddenly looks profoundly more complex. That is, the gap between current accounting practice and the exigencies of sustainability is vast – sustainability is an exceptionally demanding notion that calls into question many – if not all – of our basic assumptions about economic and financial organisation. The current view on what is best practice in management and accounting is that it supports and encourages “eco-efficiency” (again see Chapter 2) but this has little, if anything, to contribute to sustainability. Similarly, to what extent does serving the client contribute to the public interest? Are there conflicts between the two aims and if so, what are they? If accounting could be devised in a way which served the environment and the public interest but damaged the interests of specific clients, would this be acceptable?

Thus, if the project was not to be either focussed on the obvious or irrelevant to the bulk of practitioners it had to embrace both the sustainability versus eco-efficiency dimension and the client interest versus public interest dimension. That considerably complicates the research question.
If some solutions could be found on these issues, we needed then to turn to the educational and training processes of the professional accountancy bodies to seek how and where environmental issues could be introduced. At that point, two further complications arise. The first is that the technical syllabi of the professional accountancy examinations are (like so many professional syllabi across all disciplines) already too heavily loaded with material. Insertion of new material, if it is not to be treated trivially, will be difficult, involve a re-think of other matters and raise questions about what is really “core” to the syllabus. The second complication is that, if we are considering the UK as a whole, practices vary on the extent to which a relevant undergraduate degree in accounting (and finance) is considered to be a desirable pre-requisite for entry to the profession. If the obvious place to introduce environmental issues in accounting education proved to be in accounting degrees, this will not solve the problem for the majority of UK accounting trainees.

These “complications” of the project are summarised in Figure 1.1.

*Figure 1.1: The environment and accounting education: the range of issues*

<table>
<thead>
<tr>
<th>Principles driven</th>
<th>THE ISSUES</th>
<th>Client driven</th>
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<tbody>
<tr>
<td>Sustainability</td>
<td><em>The Environment</em></td>
<td>Marginal issues</td>
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<tr>
<td>Public interest</td>
<td><em>The Profession</em></td>
<td>Client serving</td>
</tr>
<tr>
<td>Transcendence</td>
<td><em>Education &amp; Training</em></td>
<td>Technical</td>
</tr>
<tr>
<td>Central</td>
<td><em>Relevant Degrees</em></td>
<td>Not important</td>
</tr>
<tr>
<td>Report for academics</td>
<td></td>
<td>Report for practitioners</td>
</tr>
</tbody>
</table>
Figure 1.1 offers two extreme points of view which have been, very artificially, labeled as a practitioner, client-driven point of view and an academic, principles-driven point of view. Neither extreme is assumed to conform with the predominant view in either academe or practice but serves, rather, to identify the extremes of concern here.

Attempting to make a coherent whole of such a diverse set of issues is, clearly, not a simple task. We have already intimated that to seek a coherence through consensus would probably be inappropriate.

What is needed are some ‘first principles’ – a ‘conceptual framework’ if you will – with which to structure the project and from which to deduce some guiding recommendations. But that is exactly the problem – if there were such (agreed) first principles then the diversity of points of view would either not arise – or would be relatively simply resolved. If we could agree that sustainability should dominate eco-efficiency, or that public interest should dominate client interest, or that education was a desirable activity and essentially about critical thinking and questioning – then we would not have the profession, the academy or the students we do. The problem would be something quite different from that we currently face.

Approach to the project

It is these tensions which have had the biggest influence on the work undertaken for this project and on the manner in which this report has been written and structured. An analysis from “the academic” point of view would have produced a focused but radical and challenging piece of work for discussion amongst academics. Its applicability to practitioners and, perhaps, even to the professional bodies would have appeared to be marginal. A project which was predicated upon a client-orientated training of accountants would have produced an entirely different report that would have been challenging in its own way but would have ignored, what we believe to be, the central and fundamental issues. We have, consequently, sought to do both in this report. The consequences are obvious. These consequences include: too abstract an analysis for
some, and too simple an analysis for others; a wide-ranging enquiry; and a report comprising less a single focused enquiry than an attempt to weave together four complex strands. These strands are: the nature of sustainability and environmental issues; the nature of education; the state of university education in accounting; and the nature and state of the profession.

To achieve this, we have undertaken a wide-ranging enquiry which comprised:

• conversations with non-accounting academics;
• conversations with accounting academics;
• a questionnaire survey of accounting lecturers;
• a questionnaire survey of students over their choice of options;
• interviews with recruiters;
• a questionnaire survey of recruiters;
• interviews/conversations with senior members of the profession, with key staff members of the professional bodies and with other “opinion formers” on matters of accounting and the environment;
• reviews of both accounting and non-accounting literature; and
• reviews of professional syllabi, professional body examination proposals, and professional body pronouncements and Royal Charters.

This coverage was designed to supply us with a flavour of the views, attitudes and experiences of all the main actors in the accounting education and training debate. Through their eyes, we attempt to understand how environmental issues are perceived and how they currently affect these actors and how they believe they might be affected in the future. The only significant issues – as far as we are aware – that we have omitted (and this was a deliberate choice to constrain the project) relate to learning and teaching processes and technologies. There is already an enormous literature on these matters and to review and examine this would have been a further report in its own right and have required some prior decision on what learning and teaching
technology was seeking to achieve – a matter upon which the present report seeks to cast some light.

Research approach employed

The conception of this project as an iterative and exploratory process was motivated principally by an intention to cover as much of the broad range of issues and views as was feasible - and to do so whilst treating very different views in as even handed a manner as we could manage. This has had a major impact on both the work undertaken and the way in which it is presented here. The primary objective of the project was a significant breadth of coverage of the issues. The principal objective of this report is to provide a coherent exposition of the breadth of the investigations. This report does not, therefore, have the sort of precise and unique focus that would be the case in a report on the investigation of (say) a single, well-developed, hypothesis. Similarly, in the interests of length, the report, arguably, provides less depth of analysis on the specific elements of the investigation than might otherwise be the case. These caveats are the explicit result of both the decisions taken about the form and structure of the project and the patterns of views and issues that emerged as the project developed.

This report draws from: a very extensive literature review; a series of document analyses; over 50 interviews undertaken specifically for this project; and three distinct questionnaire surveys. (These are explained in more depth later). In essence, the project comprises five separate empirical enquiries for a single project. Whilst each were undertaken with normal academic care, not all were as extensive or as necessarily generalisable as if they had been the sole focus of the work. The reasons for this are the obvious ones of time and resources. More significantly, though, it rapidly became apparent to us that it was the breadth and coverage of the final report that would be the best way (in fact, the only way) in which we could articulate the issues and contribute to the debate.
It was this experience and reasoning that led to the most significant decision concerning this report: this was the decision to weave the individual investigations into the text of the report rather than reporting a series of apparently stand-alone investigations. It was our conclusion that the synergy of the five interwoven projects was of much greater value – and provided more significant insight – than five stand-alone projects. Consequently, effort has been made to ensure more specific and detailed reports on some of these individual investigations have appeared (or should in due course) in other forms. These are referenced throughout the text.

The rest of this section simply provides a little more information on the more detailed steps taken in the conduct of the research.

In broad terms, the project employed four methods:

- literature search and review;
- document search and review;
- interviews; and
- questionnaire surveys.

These are reported on in turn.

**Literature search and review**

In addition to the usual search of relevant accounting literature on education, the profession, change and response to new issues, the literature search and review was formally extended in a number of specific ways.

First a systematic review of the key accounting education journals, (most particularly *Accounting Education: An International Journal* and *Issues in Accounting Education*), was undertaken and all potentially relevant pieces summarised. Then a formal trawl through *Accountancy Age, Accountancy* and *CA Magazine* was conducted for the last few years. The purpose of this latter activity was both to try to identify and track professional/practitioner views on accounting education and training issues and how they were changing; and to track the progress of proposals.
from the professional bodies on both education and environmental issues. This formed a backdrop for the enquiry from which occasional snippets have been taken. The results of these processes are reported in (primarily) chapters two, three and six.

Two separate approaches to the non-accounting literature were made: one focusing on the other professions; and one focusing on environmental and sustainability education issues. Through a combination of informal consultation with colleagues in other disciplines, systematic searches, examination of cross-disciplinary journals (such as Journal of Business Ethics and Business Strategy and the Environment), cross-disciplinary references in the accounting literature\textsuperscript{1} plus guidance given during the interviews (see below) some indication of the concerns and anxieties in the disciplines associated with the professions of (particularly) medicine, law, engineering, management and architecture was acquired. This literature is reflected, primarily, in chapter three. In addition, and primarily through the Centre for Social and Environmental Accounting Research (CSEAR)\textsuperscript{2} library and contacts, an exploration of developments (especially UK developments) in environmental and sustainability education was made. Not a great deal beyond exhortation was brought to light in this latter exploration – a state of affairs reflected in chapters two and three.

Document search and review

In addition to the literature review, a semi-formal attempt was made to assess the professional and policy climate within which the project was undertaken. This involved, in the first place, a review of the Royal Charters and related documents of the professional bodies. We reviewed those of The Institute of Chartered Accountants of Scotland (ICAS), the Institute of Chartered Accountants in England and Wales (ICAEW), the Association of Chartered Certified Accountants (ACCA) and the Chartered Institute of Management Accountants (CIMA). This was then matched by a review of the professional syllabi. This latter was undertaken to identify any references to environmental issues and/or
issues (such as ethics, social responsibility etc) which we believed needed to be considered alongside environmental concerns; and to gain a sense of how the professional syllabi were evolving/changing and/or looking for new directions. These enquiries are reflected in chapters four and six.

Guided by both our literature review and interviews, a more cursory review of the examination syllabi of other professional bodies was made. This is reflected in chapter three.

Finally, *The Toyne Report* was central to this whole project. In addition to re-reading that document, we sought to find out what follow-up to *Toyne* was being made. Whilst there was surprisingly little, the *HE21* project was unearthed in this process and proved to be a source of useful guidance.

**Interviews**

The exploratory nature of this project counselled the extensive use of interviews so that wider matters could be explored and new and unexpected issues unearthed and pursued. Consequently the interviews were a very significant part of the whole project.

Nine unstructured interviews were held with non-accounting educators from the disciplines of law (3), medicine, psychology, politics, philosophy, engineering and planning. These were all conducted by a single interviewer (the lead author) and were unstructured in that they followed the pattern of a conversation around the issues of education, the profession, students, employment and environmental issues. All but one of the interviewees were colleagues at the University of Dundee. Interviews varied in length from 45 minutes to 2 hours and were not taped. The results of these interviews inform much of the report but are particularly reported in chapter three.

Six unstructured interviews were also held with non-UK accounting academic colleagues from New Zealand (2), Australia, the USA (2) and Canada. These were held early in the project and conducted as opportunity presented itself (by the two lead authors). They were, again, in the nature of conversations, often held over a few days, around the
nature of environmental education and how the interviewees perceived current changes and developments. The impact of the Accounting Education Change Commission (AECC)\(^4\) was especially important here. These conversations had a major impact in helping us think about the nature of the project and how it might (or might not) be focused. The influence of these conversations is throughout the project and they are not, as a body, formally reported in this report.

Accounting undergraduate students were interviewed in a number of ways at different points in the project. The interviewed students were all at the University of Dundee on the BAcc programme. A series of semi-structured interviews had been held with students in different years of the programme as part of prior research: into ethical reasoning of students (see McPhail and Gray, 1996); as a part of an enquiry into gendering in accounting education, (see Bebbington et al, 1997); and as part of a more general enquiry into social and environmental accounting that was reflected in dissertations of Masters students at Dundee. In addition, as part of the University’s tutoring system, the opportunity was taken to discuss, in a very relaxed way, why students were choosing the options that they were. These, what were in effect, unstructured interviews were taken with the prior interviews to form the basis of the questionnaire survey reported in chapter five. Further, semi-structured interviews were held as part of the enquiry into recruitment. (See Chapter 7 and footnote 5).

Slightly more formality was brought to the interviews with senior accounting academics. In the first place, we drew from both a series of face-to-face interviews which had been held as part of an earlier Master’s dissertation and from many informal conversations held with colleagues around the issues of concern. Then, eight telephone interviews were held (by the lead authors) with academics who we knew to have been involved in either social and environmental accounting teaching and/or innovation in subject area coverage within undergraduate accounting degrees. The interviews lasted from 30 minutes to an hour. The interviewees were not given a pre-interview checklist but were told the broad purpose of the interview. Coverage was wide ranging across the whole area of
accounting education, teaching, students, innovation, and the profession. The only issues on which opinions were specifically sought were the environment as part of accounting teaching and, relatedly, the role of sustainability therein. The results of these conversations are reported as part of chapter five.

Finally, two series of semi-structured interviews were held with: recruiters for the accountancy firms; and senior members of the profession, practitioners and senior officers of the professional bodies.

Interviews were held with a total of eleven recruiters – all of whom were based in Scotland but who worked for a range of firms with both Scottish and UK-wide offices. A first, unstructured interview was held with one partner as a scoping exercise. Five main semi-structured interviews were then held with the recruiter from each of five firms varying in size from local through to Big 5. (Appendix Instrument D). These interviews are reported in chapter seven and formed the basis of the postal questionnaire (see below). A further five interviews were held with the specific intention of field testing the questionnaire.

The second of the series of semi-structured interviews with professional members focused upon interviewees who were selected for their roles as opinion formers and/or well-placed individuals with a knowledge of, and influence upon, developments. Interviews were eventually conducted by the lead authors with 14 such individuals. A pre-interview checklist was sent to those who had agreed (see Appendix Instrument A) and then either a meeting (in 12 cases) or a telephone appointment (in 2 cases) was arranged. Interviews were held by one of the authors in most cases and were, when the interviewee agreed, taped. Tapes were transcribed and then summarised before inclusion in this report in (primarily) chapter seven.

**Questionnaire surveys**

If interviews are a useful method for exploratory and in-depth investigation, surveys are useful for breadth and confirmation. Three
questionnaire surveys were employed in this project: one to accounting educators; one to students; and one to recruitment officers.

The questionnaire survey to accounting educators was designed as a replication and extension of Owen et al (1994). Owen et al had set out to establish why educators did or did not teach social and environmental accounting within accounting degrees. The present survey was intended broadly to establish whether there had been much in the way of change in the intervening six years. The questionnaire was sent to named individuals at all 102 UK academic institutions listed in the British Accounting Review Research Register. The named individuals were either those listed in the Register as having an interest in social and environmental accounting or, otherwise, the head of departments where no teacher/researcher professed such an interest. The questionnaire thus sampled opinion across the UK. The results are reported in chapter five and the survey instrument is in the Appendix (Instrument B). (More detail on the investigation is to be found in Stevenson, 2000).

The questionnaire to accounting students was designed to establish why students did and did not choose the options that they did. The survey instrument was derived from the interview process explained earlier and then tested on postgraduate students. It was then applied in class at three universities. The outline results from the questionnaire and its analysis are presented in chapter five but much more detail can be found in Collison et al (2000). The survey instrument is reproduced in the Appendix (Instrument C).

Finally, a questionnaire survey was made of recruiters’ views on relevant accounting graduates, accounting degrees and environmental issues in accounting education. The questionnaire was designed and revised as a result of interviewing and testing on staff and postgraduate students. It was then dispatched to over 200 Big 6 (as was) and non-Big 6 firms of accountants split between Scotland and England/Wales. (These splits were on the grounds of: the relative profile and power of the different firms and the suggestion from prior literature that Big 6/non Big 6 recruiters look for different attributes; and the hypothesis that the different educational policies of, especially, ICAS and ICAEW
would affect the Scottish and English/Welsh respondents differently.) The sample was randomly selected from the chartered bodies’ training vacancies brochures and the number circulated accounted for a little over 70% of those firms listed. The response rate was just over 40%. The broad results of this survey are reported in chapter seven and the survey instrument is provide in the Appendix (Instrument E)\(^5\).

Reflections on the research approach

This project was initiated in the understanding that the apparently simple question *What do accountants need to know about the environment?*, if not to be trivial, called for a wide ranging and iterative research approach. As the project progressed it became apparent that, to an even greater degree than had been anticipated, there is much that is fundamental about the state of the profession and its education and training basis that has remained under determined for some considerable time. If we were to stay true to our beliefs but not alienate a significant proportion of our colleagues then we could not make simple initial assumptions or take anything for granted. The adoption of a wide-ranging enquiry and, consequentially, a broad and wide-ranging report would appear to be the only possible strategy that would be both honest and meet the initial project brief. The range of methods employed and the pursuit of overview are the consequence of these decisions.

As authors and researchers we have been as open as possible about the processes we have adopted in undertaking this project in the hope that the sources of the evidence and its (inevitable) inherent limitations will help each reader come to his/her own conclusions on this complex and pressing set of issues.

Structure of the report

Consequently, this report is structured as follows. Chapter two provides a broad overview of what we mean by “environmental issues”, briefly explores the implications of sustainability and indicates some of the ways in which accounting is implicated in
environmental degradation and its reversal as well as the links between accounting and sustainability.

Chapter three is also a relatively sweeping chapter. It examines what is meant by education and considers the pressures on education to take a more active role in raising and developing awareness of environmental matters. This chapter also looks at the experiences of other disciplines, incorporates conversations with non-accounting academics and reviews *The Toyne Report* and *HE21* initiatives.

Chapters four and five examine accounting education in the universities. Chapter four reviews prior research and current and prior experience with accounting education in general and with environmental accounting in particular. This sets the scene for the more empirically focused material in chapter five where student choice, teaching experience and senior academic views are reported.

Chapters six and seven repeat the above process, but this time with the practitioners and professional bodies as their focus. Chapter six reviews a number of the key issues involved in understanding the profession and, in particular, the profession's relationship with academe and with the environmental agenda. This review, again, provides a basis on which to consider the exploration of recruitment and the views and experiences of senior members of the profession and the professional bodies which are reported in chapter seven.

The final chapter, chapter eight, attempts to draw the disparate strands of this investigation into a coherent whole from which policy prescription could be derived. The chapter considers some of the steps that the profession and the universities could take to advance the agenda of the environment, sustainability and, indeed, the profession itself and, in a detailed *Addendum*, makes a range of specific suggestions about coverage, reading and treatment of environmental issues in different parts of the accounting syllabi.

An Appendix is provided at the end of the report in which the five research instruments used are reproduced.
Endnotes:

1 Paisey and Paisey’s draft report to ICAS (now published) was especially helpful in this context.
2 The Centre for Social and Environmental Accounting Research is a research networking unit based (now) at the University of Glasgow. Based on its membership in over 40 countries, the Centre organises an annual summer school, produces a newsletter/journal, maintains a specialised library, maintains a website for students and academics and receives visitors. A major function is that of providing support and answering general enquiries from students and members in academe and practice about research into or the practice of social and environmental accounting.
3 The emphasis in the interviews on non-accounting colleagues and students at Dundee University is one example of compromise to achieve the coverage. In emphasising Dundee colleagues in our investigations of what was happening in other professions we do not believe that any major mis-representation has occurred. That is because we were seeking out literature, evidence and advice on, predominantly, ‘best practice’ in other disciplines. Whilst, obviously, more depth, richness and representativeness could have been achieved by spreading the interview net a great deal wider, practicality prevented this and, indeed, the resonance between the conversations and the results from the literature in those other disciplines suggested we might cautiously draw a reasonable confidence from the interviews. This is what we have done in the text. The interviews with students at Dundee would, very likely, have been unrepresentative in a misleading manner had these interviews not been the basis for the development of questionnaires which were applied at more than one University. The administration of the questionnaire at only three universities may well be unrepresentative but our results are expressed as hypotheses deliberately to encompass this possibility.
4 The US Accounting Education Change Commission is a major initiative undertaken jointly by the large professional accounting firms and educators to examine and develop the current quality of accounting education in the US. We explain the AECC in more detail in chapter four.
5 The investigation into recruitment was undertaken as the research for a Masters Degree by Research. At the time of writing, the full report of that research has not been received although it is still anticipated that a thesis will be submitted wherein the detail of the investigation can be found. When received, it is anticipated that a paper based on the work will be prepared for publication.
CHAPTER TWO

BACKGROUND: ACCOUNTING, THE ENVIRONMENT AND SUSTAINABILITY

This chapter identifies some of the key issues in the relationship between the natural environment and accounting. Having first rehearsed some of the more immediate aspects of the “environment”, the chapter goes on to look at both the areas of accounting which are being affected by environmental issues as well as the ways in which accounting could be more active in its response to the environmental agenda. Finally, the chapter briefly introduces some of the basic aspects of sustainability and hints at the challenges this raises for accounting and accounting education.

Central to much of this chapter – and, indeed, central to much of this research report – is the basic tension about how we view accounting and its purpose. At its simplest, this is a tension between whether we see accounting – both the practice and the body of knowledge and expertise which comprise it – as principally a response to the demands of clients or whether accounting has some more independent existence as, for example, a critical component of democracy or driven by the exigencies of the public interest. (We return to this issue in Chapter 6). It rapidly becomes apparent that our choices in this regard have a major impact on what we consider to be “environmental accounting”. If accounting is principally a responsive activity, then environmental accounting comprises activities and techniques to aid clients in the pursuit of their objectives. If accounting has some independent existence then we have a different basis from which to derive an ideal for “environmental accounting” which might look little like the sorts of
accounting typically associated with the profession. Our conclusions on such matters must have significant implications for what constitutes accounting education and training.

**Environmental issues**

As we have argued elsewhere (see, for example, Gray *et al.*, 1998, p3) there is no *absolute* and discrete set of issues which can be labeled “environmental”. The environment and humanity are, in a very basic and real sense, indistinguishable. To a considerable extent – and certainly historically - every individual, community and people depends upon the environment for its sustenance, sense of location and even sense of self. Everything we have - and everything we are – is intertwined with the natural environment. However, as many commentators have argued (see, for example, Zimmerman, 1994), the very institutions, practices, values and goals that currently we take for granted (often referred to as *modernity*) are predicated upon a desire to insulate ourselves from “nature” and to celebrate man’s ascendancy over natural forces. The success of modernity – especially in modern European and European-based cultures – in achieving this insulation for a significant minority of the planet’s denizens is the very thing we celebrate in economics, business and accounting – growth, consumption, profit, expansion, and so on. This “success” has, however, been bought at a price. That price remains a matter of significant debate but its existence should not be denied. For some, even in the privileged “West”, the price is little less than the loss of both spirituality and the centrality of the natural environment to human experience. For others (see, later, under sustainability) the price is the threat to the continuation of life on the planet. For yet others, the price might be a vague anxiety about ozone layers and the need for reducing wastes. And there is every point of view on the spectrum between these positions.

Setting aside, for the moment, the philosophical issues of how we perceive and think of the “natural environment”, it is generally accepted that the natural environment is in a parlous state, that the parlous state
is worsening steadily and that this is, by and large, a consequence of man’s activities. Indeed, the current state of the natural environment can be seen as a direct and inevitable consequence of the very successes of modernity, (see, for example, Beder, 1997; Eden, 1996). Ozone thinning, acid rain, drought, pollution, species extinction, waste disposal, habitat destruction, health - the list goes on – are no more or less than symptoms (which are closely inter-related no matter that they might appear to be discrete) of our ways of life. The 1992 Rio “Earth Summit” was a major and drastic attempt to get the peoples of the world to agree on a series of strategies to begin the process of reversing the steady decline in the state of the natural environment and the increasing destitution of those who depend upon that environment more directly than the prosperous peoples of the west. Five years later – at the “Rio+5” conference – delegates were dismayed to discover that all the major indicators had carried on moving in the wrong direction – after five years of concerted effort, matters had continued to get worse, (see, for example, Brown and Flavin, 1999).

Who is the problem? Who is the solution?

Whilst there may be some doubts expressed about the ultimate consequences of the decline in environmental health, there is little argument with the basic facts of the case. More contentious, however, is the analysis of the causes of the condition and the consequent suggestions for remediation. Centrally, we have to answer the question: is the very material well-being that many enjoy in the west – the very success of modernity – one of the root causes of both the global problems and the destitution that so many peoples outside the wealthy and privileged minority experience? The answer, we would reluctantly argue, is: very probably, yes². If that is so, then we are moving towards the asking of some very basic questions about business, consumption, growth, success – and, indeed, accounting. But, and it is a big “but”, this involves thinking the unthinkable³. As one of our interview respondents said:
... sustainable development does not (cannot) challenge the fundamentals of business. Capitalism is not up for grabs. Radical views are not acceptable from education or anywhere else. [Ex-Big Five Consultant]

Putting the matter simply, if there is a serious environmental problem that must be solved, should we (can we?) see business and conventional accounting as a major part of the solution or is it, in fact, part of the problem itself? It is apparent from many of our interviews (and indeed from much of the professionally and business-orientated literature, see, for example, Schmidheiny, 1992; Rugman and Verbeke, 1998; Gray, 1992) that any suggestion that business and accounting are part of the problem and not part of the solution is, for many, inconceivable. Any solution, it would seem, which does not place profit, consumption, growth, innovation, markets etc, at its heart is no solution at all. We (and a minority of our respondents) would disagree profoundly with this view. It is, however, substantially the majority view and we ignore this at our peril. Conversely, however, there is a negligible amount of substantive evidence (or if there is such evidence we have been unsuccessful in our attempts to unearth it) and a great deal of wishful thinking behind the assumptions that business-as-usual will deliver us out of the environmental crisis, (see, for example, Newton and Harte, 1997). We are left with a further central – and complex – tension when we come to examine environmental issues and accounting education that might be typified as “just what problem is it that we are seeking to solve?”.

It is clear that we are not going to resolve this tension (or perhaps any of the other tensions) that determine how we see and respond to issues. As we shall conclude (see Chapter 3), if education has one central purpose, that purpose must involve the provision of information about the range of substantial possibilities and the avoidance of indoctrination. We seek to follow that principle ourselves throughout the research report.
Agreement and disagreement

At a minimum, there are issues on which most commentators can agree. Resources (raw materials, natural products, energy, water, fresh air etc) are being exploited voraciously. Resource exploitation threatens some with extinction, often destroys habitats and crucial ecological systems and frequently disrupts the ways of life of communities. Production, consumption and disposal generate vast amounts of pollution (in land, water and air) and levels of wastes that are damaging to both human and non-human health and with which ecological systems are increasingly unable to cope. Human ingenuity, technology and capitalism may find solutions to some or even all of the major catastrophes that this exploitation and wastefulness is generating but, on the whole, have yet to do so, (see Weizsäcker et al, 1997). What the business systems have, increasingly, been able to address is how resource exploitation and waste disposal may be reduced and/or made less malign in impact. This pursuit of environmental management and the so-called eco-efficiency (see later) with their potential for ‘win-win’ situations² tends to be attractive to business and is the area wherein the most obvious business cases can be made. As we shall see later, it also tends to be the area in which accounting can make its more obvious contributions.

More contentiously, there is a case that the likely suspects in an analysis of environmental problems – growth, consumption, internationalisation, size and power of multi-nationals etc – do not need eradication so much as redirection and re-conceptualisation. The argument goes that increasing material consumption does not necessarily equate with growing well being (Elkington, 1995) and that what gives value is the use-component of consumption (transport not vehicles, warmth not energy, for example – see Weizsäcker et al, 1997). In so arguing, commentators are redirecting attention towards (what is referred to as) dematerialisation⁵ as the means of finding a compromise between views of traditional business and those of the more radical environmentalists. That is, it is not profit, or growth or consumption or size that is wrong, it is more that we measure the wrong profit,
consider growth in the wrong way, consume the wrong things or seek (and applaud) size for the wrong sorts of reasons.

It would be incorrect to say that the work of (particularly) Weizsäcker et al has forged an alliance between those who believe that environmental problems can only be solved by the most fundamental systemic change and those who argue for ‘business as usual’. (Bergstrom, 1993; helpfully refers to these two points of view as arising from whether environmental problems are perceived as being, respectively, either structural or marginal). However, analyses which recognise the pressing exigencies of environmental crisis whilst seeking to re-orientate the juggernaut of international capitalism are creating a place where the less extreme adherents of the different positions can perhaps begin to meet and exchange views. By contrast, there seems little prospect – at the moment anyway – that those who are wedded to the more extreme versions of international capitalism and the unbridled growth of multinational enterprises and those who, for example, place the rights of nature above those of the wealthy have any useful points of contact.

It should now be apparent why we stressed at the start of this section that there is no single thing – or set of things – known as ‘the environment’. For many, the very notion of ‘the environment’ as something separate from humankind and daily experience is an anathema. For many, humankind has forfeited its rights as (perhaps) custodians of the planet and the rights of non-human life should now be the priority. Many are unaware of the increasingly persuasive evidence that the biosphere is in a parlous state. Many are aware and interpret such evidence with relative sanguinity. Views differ, profoundly, on the causes of environmental degradation and, consequently on the solutions. And many other shades of opinion exist. What must be recognised is that none of these views can be shown to be unequivocally correct – either morally or practically. What can be shown, however, is that views can be incorrect and that strict adherence to a single point of view is unsustainable in the light of either moral or pragmatic reasoning. Such a conclusion has important implications for us when we turn to consider what accountants need to know about the environment.
Accounting and the environment

There is now a growing and substantial literature which examines the relationships between accounting and the environment. The very diversity of this literature echoes the range of views which we have briefly alluded to earlier and, consequently, represents a very healthy source of debate from which accountants can draw.

Overview of the literature

At the risk of over-simplification, it is convenient at this stage to think of the accounting and the environment literature as comprising three principal elements:

• the ‘critical’ literature (which takes a deeply radical view that challenges the very basis of current accounting practice and draws heavily from the theoretical perspectives of, for example, marxist or extreme environmentalist writers);

• the ‘managerialist’ literature (which is the term used to refer to the conventional or taken-for-granted elements of business and accounting, *i.e.* a point of view in which the essential roles of, for example, organisations, of accounting, of managers and of profit and growth are not open to substantive questioning or critique); and,

• the ‘middle-of-the-road’ or ‘reformist’ literature (which is influenced by the ‘critical’ accounting literature but which seeks to develop and understand new and/or adapted forms of current accounting practice with the intention of either ameliorating the less desirable aspects or filling the gaps left by conventional accounting practice. It thus seeks - with varying degrees of success - to bridge the gap between the ‘critical’ and the ‘managerialist’).
Although we will return to – and, indeed draw from – the first of these strands in this research report it is with the second and third strands that we will be most concerned.

This is not because the ‘critical’ literature has less important things to say – quite the contrary – but rather because the critical literature has little to say to those whose daily tasks involve the doing or teaching of what is conventionally thought of as accounting. That is, such radical perspectives (from, for example, a feminist - Cooper, 1992; Cooper et al, 1992; - or a radical environmental perspective – Maunders and Burritt, 1991; Gray, 1992) both provide very cogent questioning of the very essence of ‘organisational and economic success’, our current structures and aspirations and, consequently, the very legitimacy of all we take for granted as accountants and accounting. There is nothing trivial about the arguments underpinning these perspectives. However, if the answer to the question What do accountants need to know about the environment? includes conclusions along the lines of we do not actually need accountants – or at least not accountants as we would currently recognise them, this is unlikely to endear itself to the bulk of the accounting profession. As any solutions we might consider in a work of this sort must be predicated upon practical considerations – or, at least, a recognition of current exigencies – we will leave such perspectives for the time being, (but see Chapter 8).

It is no surprise to discover that the primary environmental emphasis in the accounting literature is on both emerging environmental accounting practice and on those areas in which conventional accounting practices have the most direct and obvious application, (see Gray and Bebbington, forthcoming; Schaltegger and Burritt, 2000; Bennett and James, 1999). A number of the more obvious areas in which ‘environmental accounting’ is emerging (and can easily emerge) are shown in Figure 2.1.
Figure 2.1: A selection of areas covered by environmental accounting

**Financial accounting, financial statements and auditing**
- New contingent liabilities
- Provisions and liabilities: *eg* land remediation, fines, damages
- Stock write downs
- Plant write downs
- Risk exposures
- Increased disclosure of expenditure

**Management accounting**
- Investment appraisal considerations
- Support of environmental management systems
- Performance appraisal
- Better identification and attribution of environmental (overhead) costs
- Identification of categories of existing (*eg* energy) or potential costs

**Taxation**
- Increased employment of fiscal instruments
- Tradeable pollution licences
- Tax breaks

**‘Managerialist’ literature**

In broad terms there are three strands to this ‘managerialist’ literature: a recognition of the ways in which the developing environmental agenda is changing the financial numbers with which accounting deals (*eg* energy costs); a steady increase in the ‘new’ categories of financial numbers that the environmental agenda is producing, (*eg* land remediation, fines and penalties); and (of increasing importance) a more anticipatory and creative recognition, within the accounting function, of potential costs and opportunities faced by the organisation. Such literature tends to be directly, if usually implicitly, *managerialist*. (That is, this
literature takes the unquestioned view of a manager of a company and, largely unquestioningly, accepts current financial, organisational and accounting orthodoxy.) Consequently, the parameters of what comprises such ‘conventional’ environmental accounting tends to be governed (in the case of financial accounting) by pronouncements from accounting standard setting bodies (see, for example, Gray et al, 1998 and see, also, Collison et al, 1996)) and (for management accounting) by the agenda of environmental management (see, for example, Bennett and James, 1998a; 1998b). In this regard, such environmental accounting tends, like so much of accounting education and training (see Chapter 3), to be essentially conservative in orientation and governed by the syllabi of the professional accounting bodies plus current practice in the area.

However, there is an increasingly widespread recognition that accounting could do more, even within this orthodox framework, to support and help both organisations and financial participants in the pursuit of their objectives. Such concern is most apparent in the potential for management accounting to support (or to hinder) the development of sophisticated and organisation-wide environmental management systems – a potential largely undeveloped at the time of writing. This concern with a somewhat more innovative management accounting is echoed to a lesser degree in explorations of more innovative approaches to financial accounting (see, for example, Huizing and Dekker, 1992) as well in the growing encouragement (especially by the United Nations and the European Union) of additional environmental disclosures within the financial statements (see, for example, Gray et al, 1998).

Strikingly however, this conventional consideration of accounting and the environment has little, if anything, to do with the environment – in whatever sense we might mean it. That is, such environmental accounting remains concerned with only financial recognition of economic phenomena as manifested at the organisational level. The natural environment (and/or society’s interactions with it) – as a notion with an intrinsic existence and one not dependent upon economic value - is almost entirely irrelevant. Thus the questions that managerialist
environmental accounting seeks to answer are *not* such matters as *how important is this eco-system?*, *how damaging is this activity?* etc. Rather, such environmental accounting might be better typified as concerned with *does the law require us to act?* or *what are the financial implications of this?*

`Middle of the road`

It is here that the third strand of literature referred to earlier – that which seeks to bridge between the managerialist and the critical – comes into play. Often driven by a primary concern with matters of, for example, accountability or sustainability, and typically reluctant to privilege organisational and accounting assumptions over environmental and social exigencies, this literature draws from the observations of the critical literature and seeks practicable, alternative, ways of using accounting. The central issue here is that accounting is *not* assumed to be an unconditionally benign activity (or unconditionally malign for that matter). It *is*, however, recognised as having (potential) conflicts with democratic ideals; with environmental protection and/or enhancement; with the pursuit of justice; and with the demands and requirements of sustainability (see later).

This literature might be typified as seeking to use new forms of accounting as a means of opening up organisations to both environmental and social accountability. The concern is to move organisations from their primary focus on economic success and wealth accumulation for management and shareholders to a broader mission in which there is explicit cognizance of both the social and environmental implications of corporate success. Much of the attention is, consequently, around environmental (and social) reporting and (increasingly) explicit recognition of sustainability issues.

Crucially, what we are looking at here concerns how we view organisations and accounting and their roles in society. That is, the orthodox or managerialist environmental accounting does begin to articulate some of the relationships that an organisation holds with its
environment but such accounting, of itself, does not challenge or seek to change what the organisation does. On the other hand the ‘critical’ literature questions – at a most fundamental level – what organisations and accounting are and what they achieve. The ‘middle-of-the-road’ literature accepts (with some misgivings) the structures, organisations, society and accounting that currently obtain but seek to change them in a manner which privileges social and environmental concerns. So, whilst a critical accounting would challenge the priorities of management and whether shareholders have greater substantive rights than other individuals and groups to substantive information, and the managerialist environmental accounting would accept without comment that shareholders and management should receive environmental information if they demand it, this middle literature would, for example, insist that shareholders and management receive substantial environmental information because they have a duty to consider the implications of their actions\textsuperscript{10}.

In summary, our three strands to the environmental accounting literature represent three different perceptions about the nature of the organisational-environment relationship and the role that accounting can (and does) play in that relationship. For the managerialist literature there is no question that, whatever the problem, current organisational orthodoxy – perhaps with a little change – can deliver it. The sort of accounting needed, in this scenario, is no more than relatively minor changes to current accounting practice. For the ‘critical’ perspective, the organisational-environment relationship as it currently exists is almost exclusively malign and nothing short of systemic change can alter that. From such a perspective, it is not clear that any accounting is desirable. For those in the middle ground, (but see Tinker \textit{et al}, 1991), there is no question that substantial change is needed if environmental crisis is to be ameliorated but they seek to work through evolution rather than revolution. Here new forms of accounting are sought to replace, supplant and over-ride conventional forms of accounting in support of that evolution.
The distinctions between the three points of view are cast into stark relief if we broaden our concern from the ‘environmental’ to consider the framework within which environmental issues are increasingly being, at least ostensibly, addressed – that of sustainability.

**Sustainability and accounting**

Sustainability (or sustainable development)\(^1\) is typically defined by reference to *The Brundtland Report* of 1987. That is, sustainable development is development which:

... meets the needs of the present without compromising the ability of future generations to meet their own needs (*The Brundtland Report*, UNWCED, 1987)

Sustainability is a profoundly complex notion and is conceived of – and defined – in many different ways, (see, for example, Pezzey, 1989; and see Gray and Bebbington, forthcoming; for a simple introduction). At its simplest, it can be broken down into several components: the needs of the present; the needs of the future; environmental stewardship; and social justice. That is, are environmental resources being employed in a responsible manner that maintains the bio-sphere in a life-supporting state and in a way in which all societies have access to those resources in order to satisfy their needs?

The World Business Council for Sustainable Development (WBCSD) coined two elements for sustainability – *eco-efficiency* and *eco-justice*. Eco-efficiency refers to the way in which environmental resources are exploited and managed. Eco-justice refers to the way in which necessary access to those resources is distributed amongst peoples. These are both useful and dangerous concepts. They are useful in giving us a means of focusing on core issues regarding sustainability – and, in particular, clarifying that it is with eco-efficiency that business is most concerned and where business can make their major contribution. In addition, by coining both phrases, the WBCSD has emphasised that sustainability has as much to do with social justice as it does with
environmental stewardship. However, the terms are dangerous in that the focus on eco-efficiency distracts attention from *ecological footprint*. That is, one may be using environmental resources increasingly efficiently but, because of, for example, the firm’s desire to continue growing, the overall impact of the organisation’s activities may also be growing (albeit at a slower rate than would otherwise be the case). This overall impact is captured in the term *ecological footprint* (the amount of land mass necessary to sustain an activity) or, if we amend the WBCSD’s own terminology, *eco-effectiveness*. These elements are summarised in Figure 2.2.

Figure 2.2: Do we currently satisfy the conditions for sustainability?

<table>
<thead>
<tr>
<th>CONDITIONS</th>
<th>Satisfy the needs of the current generation?</th>
<th>Satisfy the needs of future generations?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eco-justice</td>
<td>NO - income inequality is growing, many millions live in and die from poverty</td>
<td>NO - present trends will make matters worse, very little evidence to suggest otherwise</td>
</tr>
<tr>
<td>Eco-efficiency</td>
<td>NO - but some positive evidence if one is optimistic</td>
<td>POSSIBLY - if one is optimistic</td>
</tr>
<tr>
<td>Eco-effectiveness (ecological footprint)</td>
<td>NO - all evidence suggests that global impact of production and consumption is worsening</td>
<td>NO - no evidence to suggest a change of direction.</td>
</tr>
</tbody>
</table>
For sustainability to obtain, all six conditions must hold, but currently do not do so. The most optimistic interpretation of the evidence is that eco-efficiency is improving and may very well continue to do so. Eco-efficiency alone is insufficient to deliver sustainability.

More pertinently to accounting, most organisations may very well be able to seek out and exploit eco-efficiencies through waste savings, energy reductions, closed-loop technology, more efficient design and so on. Government policy can certainly play a major role in encouraging business to do just this. The very nature of companies is, however, that they are expansionist and will exploit market differences and inefficiencies. Such a creation is unlikely to be capable of sustainability without very profound changes in both the rules of the game and the way performance is measured and rewarded. An increasing number of companies is explicitly recognising this, (see Bebbington and Gray, 1995; 1996a; Gray and Bebbington, 2000).

Accounting, similarly, whilst it has a major role to play in aiding companies exploit eco-efficiency is more likely – at least in its more conventional forms - to encourage un-sustainability than sustainability (Gray, 1990; 1992; Gray and Bebbington, 2000). Newer forms of accounting – environmental and social reporting, social accounting and accounting for sustainability – are needed if accounting is to contribute to the pursuit of sustainability. Quite what a full sustainability accounting or, more prosaically, a “triple bottom line accounting” might look like is still far from clear. However, current thinking suggests that, in the absence of major changes in the pricing system and market mechanisms (as envisaged in the EC Fifth Action Programme for example) accounting will need to develop environmental and social reporting which moves towards environmental stewardship and social justice. In addition, there would need to be some form of sustainability accounting in which, for example, the organisation’s contribution to – and subtraction from - environmental and social ‘capital’ (for example) were fully recorded and integrated with the financial statements.

Perhaps it is as contentious to suggest that accounting is part of the sustainability problem as it is to suggest that accounting should
be part of its solution. Certainly, there are some who still believe that accounting is a neutral technology to which no blame can attach or from which no innovation can be expected. This is an increasingly rare point of view. Whether we choose to conceive of the environmental crisis in managerialist (‘marginal’) or radical (‘structural’) terms, accounting is importantly implicated in the current situation and can do much to worsen, alleviate or redirect the problem. This remains one of the key axioms of this report.

Conclusions

The level of resolution at which we conceive of “environmental issues” determines how we perceive them. Bergstrom (1993) suggests that we might see environmental issues as either “marginal” or “structural”. This, consequently, determines the nature of the problem that we are seeking to resolve. If environmental issues are only marginal, then managerialist solutions are quite appropriate – work needs to be done in, most particularly, the pursuit of eco-efficiency – but the problem does not require radical reconception of our ways of financial and economic organisation. If, however, it is the sustainability problem that we are seeking to resolve, matters are far less clear. There is a disjunction here as well. For many – including the majority of business commentators and the bulk of our respondents (see later chapters) – even a radical solution to sustainability can be perceived as (assumed to be, perhaps?) an iterative process of marginal steps. On the other hand, for many academic and/or non-business commentators, nothing less than a fundamental re-organisation of our systems of financial and economic organisation will suffice. Whilst accounting may, (through, for example, experiments in sustainability accounting), help identify the nature and size of the problem here, for the vast majority of accountants it is simply too big a step.

Whilst we tend to believe that only this more radical reaction is likely to deliver anything approaching sustainability, we recognise that if we are not to alienate the bulk of our academic, practitioner and
business constituency, we need to err towards iteration and caution. The optimistic – perhaps hopeful – strategy is to look for a series of marginal iterations towards less un-sustainable accounting systems. This would involve, in addition to the pursuit of eco-efficiency accounting, the development of more substantial systems of environmental and social reporting as well greater emphasis on social justice issues through a new (and as yet un-imagined) social accounting. This, broadly, is the point of view which is adopted throughout the bulk of this report.

Even this approach may appear too radical to some. This reaction may, in part, be due to technical questions about how such a change might be achieved. But the reaction is also, it would appear, in part because there are accountants who find the idea of embracing such a clearly public-interest orientated concept as sustainability quite troublesome. Why this should be lies, we think, in both the way in which the accounting profession socially constructs itself and the role that accounting education and training play in that process. It is to this that we now turn.

Endnotes:

1 “Modernity” is a largely unavoidable piece of jargon that is used to capture the phase of history in which we currently live in the West. It is typified by the triumph of reasoning and science over religious dogma (a process known as the Enlightenment) and is manifest in such notions as rationality, positivism, linear progress, control, separation of man from the environment - and the privileging of these over, for example, spirituality. The movement referred to as post-modern is the reaction to - or development beyond - modernity to re-establish and recognise that beyond the “rational” etc.

2 See, for example, Korten (1995); Angell et al (1990); Tickell (1990); Holdgate (1990); Plant and Albert (1991).

3 This raises a most interesting issue which has immense implications for education. If something is “unthinkable” why is this so? A matter may be uncomfortable, we might prefer it to be otherwise, but that does not make it unthinkable. Only education (or a lack of it) and/or very subtle indoctrination can make something “unthinkable”.
‘Win-win’ situations are those in which there is both environmental and financial benefit from the action. Obvious examples include reduction in energy consumption or the reduction in wastes - both of which lead to less environmental impact and economic gains to the organisation. The term is most usually associated with Walley and Whitehead (1994) who discuss the significant limits to such win-win situations.

Dematerialisation is a term increasingly used in industry to refer to systematic attempts to reduce, often profoundly, the (raw) materials contained in a product or production process. It represents a change in attitude in which it is not the product upon which one focuses but rather the service derived from the product and seeks ways to deliver that service potential in the least environmentally harmful manner.

This position or perception is typically represented by individuals of an eco-feminist or deep ecology standpoint.

There are many areas missing from Figure 2.1. Amongst the more obvious are those related to financial institutions and markets including market response to environmental issues and the growth of ethical and environmental funds. (See, for example, Gray and Bebbington, forthcoming). Also excluded are the more speculative approaches to reconfigure the accounting function (see, especially, Schaltegger, 1996) although those which are directly concerned with sustainability are explicitly considered later in this chapter.
Chapter Three

Environmental Issues and Education

In the last decade, environmental issues have become increasingly prominent in the public consciousness and have, accordingly, risen up the economic, political, business and social agendas. It was therefore inevitable that attention should turn to education as one of the major mechanisms through which society might learn about, and begin to deal with, the challenges that this (apparently new) environmental agenda raised. At one end of the educational spectrum, the broad populace was increasingly exposed to environmental issues both through the media and through schooling. At the other end of the spectrum, new specialists emerged to deal with new functional demands; specialist courses in appropriate aspects of science, management and ecology, grew in popularity and new professional groupings emerged to foster new specialisms in such areas as environmental management and environmental assessment. But if the ‘environment’ was to take its appropriate place in society’s activities and consciousness then it was neither general knowledge nor specialist expertise that would necessarily achieve this. What was needed was for all peoples to have a relatively sophisticated appreciation of how environmental issues affected both their personal and professional lives. In addition, individuals, groups, communities, etc, needed to be capable of implementing imaginative change – change of the sort that would expunge accepted environmentally-malign ‘best practice’ in favour of more environmentally-sensitive practices.

The role that education – and, especially, post-school and professional education – could play here was obvious. Educators and researchers needed to establish how their disciplines could best meet
The Provision of Education and Training

the challenge of the environmental agenda and then, through the usual educational media, incorporate best environmental practice into their disciplines and professions. Thus, it was hoped, would environmental issues become a central and accepted part of all activities and the environmental crisis thereby addressed – perhaps even solved.

This was the message of *The Toyne Report* (DfE, 1993) – probably the most influential publication so far on the need for environmental issues to be incorporated into British further and higher education. The report laid out the case for such incorporation of environmental issues, bemoaned the woefully low levels of educational response to the environmental agenda and called upon educationalists to rise to this urgent and demanding challenge.

On the face of it, *The Toyne Report* looked like an entirely reasonable challenge to an intelligent and flexible workforce. As it transpired, however, it proved to be a naive document. The Toyne Report assumes, for example, that teachers are capable, willing and permitted to undertake such critical reviews of their disciplines. It assumes that teachers are not already so pressurised that any change will be difficult to encourage. Equally, it presumes that students would acquiesce – perhaps even be keen to participate - in such a substantive revision of syllabi. Furthermore, the report makes no allowance for the preferences (inferred or expressed) of the funding and employing organisations upon whom the teachers and students are dependent.  

But perhaps most significantly, *The Toyne Report* failed to address two central questions, (see also Ali Khan, 1996). The first of these we met in chapter two, namely, how do we conceive of the environment and ‘the environmental agenda'? Are we considering here some minor tweaking of existing theory and practice or are we addressing a fundamental review of the very basis of modernity and, consequently, of the very basis of our current knowledge, disciplines, organisation and practice? The second issue is equally testing. That is, what is it that we expect from ‘education'? Is the purpose of education the preparation of trained and critical minds who have been exposed to
and challenged by a broad and demanding scholarship? Or do we, rather, see education as a means of preparing young persons for gainful employment? There is every likelihood that these two objectives may frequently be in conflict.

This chapter seeks to provide an introduction to these matters by, first, briefly examining the purpose(s) of education in general and environmental education in particular and then moving on to review the experiences from disciplines other than accounting. Through this process we hope to set the scene for the more detailed examination of the elements of accounting education and training which follow in subsequent chapters.

Purpose of education

From Plato, through Rousseau, Dewey and Marx to Illich and up to the present day, the purpose of education has remained a matter of unresolved debate. The debate itself has been immensely wide ranging and has encompassed questions of philosophy (for example, what are the characteristics of an educated citizen? what education does a civilised society require?), questions of morality (for example, what rights to education does a citizen have and does education improve the quality of moral behaviour?), questions of politics (for example, whose values should be inculcated in education? is education for the citizen or for the state?), questions of practicality (for example, can all people become ‘fully educated’?) and questions of economics (for example, is the purpose of education to serve the current interests of the economy? how much education can a nation ‘afford’?). Such issues are, obviously, matters of value preference and not amenable to simple solutions. However, what is a great deal more important in the present context is that the diversity be recognised. There is a, perhaps inevitable, tendency for educational theory to be, what is referred to as, ‘totalising’ – in the sense that only one view of education is allowed to dominate a society at any one point in time thus forcing all other points of view into the margins as ‘extremist’, ‘idealistic’ or ‘impractical’. And
this, in itself, brings to centre stage the essential question in education – is it a mechanism by which to suppress contrary argument and allow the powerful to marginalise other arguments (about education as much as about anything else)? Or is the very nature of education that it should not permit or even tolerate tendencies towards indoctrination and repression? As we shall see, this question is a great deal more subtle than it looks but we are clear on our views: one major function of education must be the capacity to challenge all ‘totalising’ tendencies and to resist indoctrination and repression.

Elements of education

Bowen and Hobson (1987) seek to clarify the broad educational debate by identifying three major strands in education: the provision of the basic skills for a functioning citizenry (literacy, social skills, community awareness etc.); vocational education and training; and the encouragement of aspirational, independent, critical minds (what they call ‘transcendence’). The first of these is principally the function of the schools whilst it is with the second and third strands that the universities and professional bodies tend to be most concerned.

The point that Bowen and Hobson are making is that the skills and vocation strands are, in essence, socialising functions of education. And although they are crucial attributes in any educational system they are, inherently, conservative. Without the encouragement of aspiring, independent, critical thinking (transcendence), the society will have little ability to adapt and change. Hence, they argue, all cultures contain elements of both conservation and creativity and the education of the society reflects the culture in the balance it places on these two. Too much emphasis on conservation/socialising runs the joint risk of a static society and/or one in which there is no challenge to the extant status quo. An essential requirement of any totalitarian regime is that it controls the education systems and represses the independent, critical (transcendent) elements within it. On the other hand, too great an emphasis on transcendence, it might be argued,
would lead to too great a challenge to the *status quo*, instability and/or a disruptive and ill-equipped labour force.²

**Education as liberating or repressive?**

Of some significance here, is to note that the contrast between liberating and repressive education systems may very well not be as easily identified as the earlier discussion might suggest. That is, the most subtle form of a repressive education system is one which is not recognised as having that quality. This idea is captured in Gramsci’s notion of hegemony which seeks to encapsulate “the relationship between power, ideology and culture in modern societies” (MacKenzie, 1999, p31). The importance of the concept, as explained by, for example, Finlayson (1999, p141), is that a dominant class need not rule by coercion. It is more successful in its rule if the people of the society believe themselves to be best-served by the system and their subjection within it. The populace thus colludes in its own suppression. This state of affairs is achieved through language and ideas. This ideology both encourages the society to believe that the world is the best of all possible worlds and, simultaneously, prevents opposition from being expressed. It achieves this because, either, the populace does not have the language to express opposing ideas or opposing ideas are represented as being self-evidently ridiculous.³ Obviously, the most effective means of establishing such hegemony is the education system. An education system can give the impression of educating the populace and encouraging debate and critical thought whilst, simultaneously, suppressing the very arguments that might act as a challenge to the current hegemony.

There are two points at issue here. First, an education system which appears to be liberating and empowering may, indeed, be acting in precisely the opposite way. The second point is that the educators should be making explicit choices in this area – otherwise they stand potentially guilty of indoctrination, (however unconscious that indoctrination might be). Central to any serious discussion of
education must, it would seem, be a careful examination of the extent
to which teachers are acting in a manner which could be construed as
indoctrinating. (As we shall see later, a central criticism of accounting
education is that it constitutes a very clear case of indoctrination -
see, for example, Loeb, 1988). And indoctrination is a fairly simple
challenge to refute, at least in principle. If students are encouraged
to consider - and permitted to accept - fundamental challenges to the
current state of received wisdom, then the charge of indoctrination
can be refuted. 4

Vocational education

Such matters are brought into sharp relief when the matter of
vocational education is considered. (The tensions between vocational
and, what they refer to as, “liberal education” are very well covered
in Paisey and Paisey, 2000; and only a brief outline needs to be
provided here).

The essence of the problem is an obvious one – as vocational
education is explicitly directed towards the preparation of students
for a future role in, typically, a profession or functional specialism, to
what extent must that educational process take the current professional
standards as given and inviolate? There is both a moral and a practical
dimension to that question. The moral question relates to the extent
to which the activity can be justified as serving society and the public
interest – and, indeed, doing so in the best way possible given the
current state of knowledge. It is probable that we might consider that
a healthy, educated professional activity must constantly challenge
itself, its assumptions and its practices. But the practical argument
comes into play that too great a level of challenge runs the risk that
students will be unable to function in their chosen area of activity.
By constantly questioning – however legitimate and informed that
questioning might be – the student is unable to ‘get the job done’
given the way in which the job is currently perceived. Equally, such
a questioning student is bound to cause discomfort and/or irritation
to those who work with and/or employ her/him. Furthermore, there is the problem that teachers who have themselves been inculcated into the current professional orthodoxy, may be unable and/or unwilling to provide the basis and support for such a challenging educational experience.

There does not appear to be, (as far as we can tell and discuss later), any especially clear guidance on how different vocations experience and deal with the inevitable tensions between the orthodox and the critical approaches to education. As a general rule, however, it appears that vocational education and vocational educators are both slow to respond to new areas and appear to be reluctant to actively encourage critical debate. Further, it seems that this tendency to conservatism arises from reasons as diverse as the educators’ own experiences and education, conservatism amongst the students, the confidence of the vocation itself, the strictures under which the vocation operates and the relationship between the academic and practising branches of the vocations. From our research for this report it does seem that vocations are more similar than they are different and that they all experience very similar conservative tendencies. Whether we are considering matters of innovation, ethical conduct or environmental responsibility, vocational education appears to be ill-equipped to respond proactively to new demands.

**Education, the environment and sustainability**

As we saw at the start of this chapter, the response to the developing environmental agenda by the educational sector and the professions in the UK was perceived as being slower than many thought the situation warranted: the result was *The Toyne Report*. Whilst the 1990s saw a significant increase in the attention given to environmental issues in the schools – a development greatly influenced by the availability of appropriate guidance and learning materials – the response by the universities in particular has been seen as laggardly, (see, for example, Ali Khan, 1995; Park et al, 1998). Whilst specialisms were growing,
the issues were not finding their way into the heart of disciplinary syllabi. The reasons for this were varied and there has been some significant progress in the later years of the decade – as we shall see later. But as we shall also see, the responses were either fairly superficial; were restricted to specialist programmes and modules; and/or the domain of a few dedicated environmental specialists. If the environmental agenda – as we discussed in chapter two – is a relatively simple one with little or no urgency and fundamental challenge attached to it – then the current slow and largely piecemeal response is probably acceptable. If, on the other hand, the demand is to address sustainability through the lens of each discipline and bring this into the classroom and the vocational and professional syllabi, the situation is altogether more worrying. This seems an appropriate point at which to illustrate what an education with sustainability at its core might demand of its teachers and students.

An especially thorough examination of what such education might mean is offered by Huckle and Sterling (1996) and, more particularly, by Sterling (1996). Figure 3.1 summarises the elements that, he argues, must comprise any education for sustainability.
Figure 3.1: Characteristics of education for sustainability

Education for sustainability is:

- **Contextual**: addressing the crises of modernity, grounded in local, social and ecological contexts;
- **Innovative and constructive**: postmodern thinking with the aim of providing a safe, humane and environmentally sustainable future;
- **Holistic and human in scale**: focused on the development of the whole person and socially oriented;
- **Integrative**: interdisciplinary and transdisciplinary;
- **Process oriented and empowering**: engaged, participative learning that is intrinsic to life;
- **Critical**: ideologically aware and socially critical, drawing from deep green and red-green theory, no educational values are politically neutral;
- **Balancing**: of (eg) knowledge with values, economy with ecology, local and global;
- **Systemic and connective**: emphasis on relations and patterns, recognising wider systemic interactions and effects;
- **Ethical**: clarifying values, moving to transpersonal ethics and ecological pluralism;
- **Purposive**: exploring, criticising values and alternatives for sustainability, seeking change;
- **Inclusive and lifelong**: for all people and throughout lifetimes.

*Adapted from Sterling (1996, pp22-24)*

The argument underpinning Figure 3.1 is that sustainability requires nothing less than a fundamental re-think of western values, principles and organisation. Education, it is thus argued, must respond by not only providing the means through which such a fundamental re-examination can take place but must, itself, re-define the very nature of what we normally consider to be the educational process.

Is the world of pressurised educators, poorly resourced students, audit- and ‘quality’-orientated systems of evaluation and rapidly changing workplace practices ready for such a fundamental shift? Almost certainly not – but it may well be that those very symptoms which ensure that radical change cannot take place actually point
to the very reasons why they should. The increasing imposition of crude, manufacturing-style principles on the universities is not only forcing an inevitable move away from the aspiring, independent and critical (‘transcendent’) facets of education but is probably also a late manifestation of the very thinking which makes the radical pursuit of sustainability so essential. In a world where the euphemistic language of ‘quality’, efficiency, efficiency gains, productivity, performance, output and preparation for the workplace are increasingly used to define universities, the possibilities of a liberating education are elusive. More poignantly, something central to what we often consider to be a characteristic of a civilised nation (namely an independent, aspiring and critical educational system) is being destroyed. It seems highly likely that the very forces that are leading to this tendency are the same ones which make the exigencies of sustainability so urgent.6

The implication of this is that there must be some means whereby educators can fulfil their responsibilities to seriously address the issues that sustainability raises for conventional disciplines – perhaps without (yet) going as far as Sterling would like but, equally, without being subject to the pressures that make such enquiry virtually impossible.

In the next section we turn to look at how disciplines other than accounting and finance are dealing with these demands.

Response of the professions

A key element in the research for this report was to learn as much as seemed feasible about how other disciplines – especially those with a vocational orientation – were dealing with The Toyne Report call to arms. To this end, the research process involved a substantial review of the literature with the particular aim of identifying the initiatives in the disciplines of law, medicine, engineering, architecture, management and, to provide contrast, psychology, politics and philosophy. This review of the literature was supplemented by unstructured interviews with colleagues from those disciplines. As it transpired, the research
process had adopted the implicit assumption that other disciplines and professions would have fewer conservative tendencies, be subject to less substantive constraints and would have made more progress in addressing environmental (and sustainability) issues than we perceive to be the case in accounting and finance (see the following chapters). This assumption was almost entirely incorrect.

Some initial investigation undertaken for this report (McPhail, 1998) confirmed Paisey and Paisey’s (2000) broad conclusions that the professions (medicine, law, engineering and accountancy in McPhail’s study; medicine, law, architecture and accountancy in Paisey and Paisey’s study) were more similar than different. The influence of the professional bodies, the functional constraints within which the professions perceive themselves, the work and training experience of the teachers, the technical nature of the dominant knowledge forms, the instrumentality of the ethics, the discouragement of critical, radical, transcendence thinking all appear to be present, to a greater or lesser degree, in each of the professions. For instance, Ward (1998) says of lawyers and legal education:

*Rather than embracing the fluidity and empowerment that the imaginative qualities of law provides, the lawyer all too readily seeks recourse to the pretences of intellectual formalism in order to deny the political responsibilities which the imaginative conception of law demands. In short, from an educational perspective, rather than teaching putative lawyers to be politically engaged citizens, constantly describing and redescribing their legal context, we take potential citizens, deny their imaginative and creative potential, and teach them case after case, statute after statute, rule after rule. ... Lawyers take a pride in their professional status, as if it somehow legitimates their fantasy existence in some sort of reified world in which real questions of justice and fairness can be ignored. The legal academy, like the legal profession, spends so much of its time engaged in trying to perpetrate fictions of its own legitimacy. Rather than embracing the political responsibility which legal education should demand*
of the legal educator, there is recourse to teaching the so-called legal “truths”. Yet the real truth is that every lecture, every tutorial is a deeply political, and textual, exercise. The law student is all too easily lured by these illusions of legal “truth”. (Ward, 1998, pp177/8)

(The similarity of Ward’s remarks to often-voiced concerns over accounting education are striking). A similar point of view (from perhaps a less likely source) comes from Milton Friedman who sees vocational training as something which:

... increase[s] the economic productivity of the student but does not train him (sic) for either citizenship or leadership. (Quoted in Niemark, 1996, p8)

Such sentiments crop up time and time again as anxieties about the professions and vocational education and training. When we consider environmental issues, the response of the professions is again broadly more similar than different. Thus Park et al, (1998), from a comparative look at four professions, conclude that there is too much talk and confusion and not enough action. (See also Ali Khan, 1995). The essence of the problem is, (as, for example, Brown and Cortese, 1998; outline for the management profession), that there are too many barriers to change. Inertia plus the sorts of difficulties we have outlined above all go to ensure that change is slow. Furthermore, as Brown and Cortese go on to argue, where the changes occur, they do so in relatively focused areas such as environmental management – rather than, as would be more desirable, in the study of management embracing the central importance of environmental issues.

There would appear to be widespread agreement that the only way in which change can be guaranteed is if the relevant professional bodies make explicit recommendations for the incorporation of environmental matters. This is the case made by Barwise (1994) in the context of health professionals and by Wylie, who, in the
broader context of humanities and the social sciences argued that there is a need to:

... convince key groups of employers, lead bodies and professional organisations that environment-related skills are valuable. Until this has been accomplished the curriculum in some areas will not be redirected towards environmental competence. (Wylie, 1995, p51)

Of the professions we looked at, the engineering profession appeared to be the most advanced, (see also Tanel, 1994; De Feis, 1994). The professional engineering accreditation body in the UK has made explicit reference to environmental issues since 1985 and, in 1991, the World Federation of Engineering Organisations called on world governments to adopt sustainability as a guiding principle. Duffel (1995) argues that this has made an important (but less than dramatic) impact on engineering education. However, he goes on to make a more general argument that all disciplines and professional bodies will be slow to embrace environmental issues unless the nature of the discipline itself makes direct involvement with environmental issues unavoidable.

Talking with other educators

The fairly extensive exploration of literature from other disciplines and professions had painted a less-than-encouraging picture of their response (or lack of it) to the developing environmental agenda. Almost without exception other disciplines and professions were, it would appear, responding to a widely-recognised challenge with inertia. Only where a functional development made involvement with environmental issues inevitable and/or key individuals were pushing a particular environmentalist interest and/or a formal lead had been provided by some authoritative body (such as a professional syllabus body) was the response anything other than lukewarm and piecemeal. We therefore concluded that we needed to spend a little time talking
with other educators to see if we had correctly understood the literature and, if so, why this situation might obtain.

It is worth stressing here that our conversations with other educators were both predominantly unstructured and, relatedly, held throughout the research process. The unstructured nature was chosen because it seemed, a priori, that if anything was to be learnt from other educators it would come from broad-ranging discussion about the nature of their disciplines, the influences on what they teach and their responses to new issues – of which environmental issues would be only one. To have imposed some prior structure on such a discussion seemed highly inappropriate. The discussions were held throughout the research, rather than being a specific, firmly located part of the research, because:

- it had been anticipated that these conversations might be best employed as guides to disciplinary strategies to dealing with change;
- it had been hoped that they might act as a backdrop and/or contrast for the more focused research into accounting; and
- the prosaic matter of making arrangements for the conversations to take place militated against any desire for a block of interviews.

One important consequence of this approach was that the majority of such conversations were held before the (tentative) conclusions about other disciplinary and professional experience had been formed.

The practical outcome of the foregoing is that a number of conversations with educators whose work was linked to an existing or emerging (environmentally-related) functional activity – environmental law, environmental management, water law, resource economics, environmental health etc - did not, in the end, offer any greater insights than those reviewed earlier. That is, although it tended to be a matter of personal interest that had brought an educator to an area, it was far from obvious that all of those educators would have practiced, researched and, most importantly, taught what they did had not that
functional specialism or accepted area of the subject already existed. There certainly seemed to be no question that the existence, popularity and structure of the courses on which these educators taught was a direct function of developments outside their control. More particularly still - and this involves a highly subjective element of inference – the way in which the subject was approached by the educators appeared to owe more to the individual character and approach to scholarship than to any essential element of urgency in the discipline. Thus, environmental law or environmental management, for instance, could be taught as either a vocational training-based subject or as a deeply radical challenge to organisational and institutional structures. It did not seem that there was any factor within the discipline, the profession or the institution which determined this – it depended entirely upon the character of the teacher. The two questions, for example, What has the law to say on the matter of sustainability? and What must the law do to enable real sustainability to occur? are both ostensibly about law and sustainability but one is reactive and conservative, whilst the other is creative and innovative. The similarities with accounting education are striking as we shall see.

More illuminating, therefore, was the smaller number of discussions held with educators who were either not environmental specialists or whose specialism did not derive from an established and/or (environmentally-related) functional area.

Conversations with educators who did not consider themselves to be “environmental specialists” quickly foundered on this issue. In essence, whilst aware of environmental matters, they saw them as being dealt with in the specialist areas of the discipline, and/or as being covered by those who did specialise in such matters, and/or as emerging in due course through the normal processes of the profession (eg as law affects design considerations, or as environmental stakeholders become an increasingly important part of management). Beyond that, environmental issues had “not been thought about in any particular detail”. Why was this? The answers seemed simple enough: environmental issues had not impinged on the consciousness of these
individuals as a matter of any greater or lesser significance than any other issues. In a busy life with a particular focus on their professional work, why bother with the environment?

Although it is, inevitably, difficult to be certain about such matters, this attitude that environmental issues were no more pressing than any other issue did appear to be at the heart of what tends to be thought of as inertia. When pressed to carefully consider the larger issues in detail (apparently for the first time in some cases) there was a general, joint, reaction that comprised two elements. First, many discussions (and this also happened with accountants) led to the comment that the bigger environmental issues (e.g., sustainability) were “rather frightening”, demanding, as they do, a substantial re-think of personal worldview and responsibilities as an educator. Second, there was a distinct sense of “would not be sure how to go about it”.

We believe that we have something quite important here. If one believes that environmental issues are just that – environmental issues rather than (say) symptoms of a larger problem – then radical re-consideration is not necessary. If, in addition, one can see an increasing reference to environmental issues in other parts of one’s discipline one can (understandably) presume that (adequate?) progress is being made. Further, if one has an implicit faith in both the rightness of one’s discipline and the broadly benign nature of organisational and institutional structures, then one will, inevitably it seems, passively assume that matters are in hand and require no response from oneself. In the absence of any strictly directed, authoritative guidance, how could anybody imagine that environmental issues deserve any further attention?

The larger sustainability issues will often appear to be very threatening indeed - to the extent that individual educators have become aware of them. That is, they have the potential to challenge virtually everything that one does and believes about the world, oneself and one’s professional life. That individuals shy away from such examinations really comes as no surprise.
This view is broadly confirmed by those educators with whom we discussed these matters and who would think of themselves as environmentalists first and specialists second. Where an issue, like the environment, is neither an established part of the discipline nor being driven by some central professional initiative (such as design for sustainability initiatives in engineering and architecture) its growth in a discipline would appear to follow a particular pattern. Key individuals and researchers start to raise the issues, a research literature and then textbooks emerge. The area gains a credibility when specialist journals appear – but this does not prevent it from being still a (relatively marginal) specialist subset of the discipline concerned. From that point on, we were unable to discern what determines whether the area remains viable but marginal, withers away or becomes ‘mainstream’. All of the disciplines we looked at would appear to still be in those early stages. Here, much of the change depends on key individuals and these individuals struggle as much in other disciplines as they do in accounting. To our surprise, one politics educator said:

... it is very difficult to raise new issues outside the norms of the academy ...

A similar, though less pressing, argument emerged from philosophy where, one might have thought, there was no *a priori* restriction on what was studied and taught. Indeed, philosophy students emerged – as far as we could tell, as the only group of students who did not actively question the “relevance” of what was taught. Nevertheless, it did seem that there were two overwhelming factors encouraging inertia – and this did not seem to be dependent on the discipline at all. First, even innovative lecturers with a strong belief in environmental (or other innovative) issues in teaching imposed a form of *self-discipline* upon themselves and would not teach something that they did not feel was appropriately part of the discipline.13 Second, some conversations brought up the matter of the competence of the teacher to deliver a sound education around the issues of concern and this was, in turn, tied in with the notion of professional standards and duties to students.14
This brief (and largely impressionistic) review of disciplinary experience has provided a glimpse of a world characterised more by conservatism than by innovation. None of those we spoke with felt that there was much substantial impediment to environmentally-based research or to research on other non-mainstream issues$^{15}$ but that there were a significant array of issues which were actual and/or perceived barriers to teaching development. This, to our mind, points to a potentially significant malaise in UK universities that is wider (if such is possible) than just environmental concerns. One comment that rather leapt out when re-reading the notes made from these discussions led us to tentatively explore this line of thinking. The discussion with an educator in politics concluded that any resistance to change tended to arise through actual (or anticipated) comments or actions of colleagues. It arose, he argued, more through their ignorance than through deliberate restriction. Disciplines train their adherents into particular ways of seeing and thinking. Environmental issues - once they are considered as more than relatively trivial matters - transcend these disciplinary boundaries and, as this colleague said “the connections are so very difficult to see”. The comment seems to fit our experiences in constructing this chapter. The inference we draw is that, for reasons well beyond the limits of this research report to explore, there is a natural and deeply-rooted conservatism in university teaching that will take a major initiative to overcome. At a minimum, any such initiative would require a means to ensure that university teachers are fully apprised of the issues and have access to relevant educational materials.

If these themes which appear to be emerging from this examination of other disciplines are reliable, it seemed appropriate, before moving directly into accounting and finance, to look more closely at one of the disciplines most closely allied with accounting – management and business studies. This is an area which has experienced some considerable exposure on environmental issues and is one in which some significant activity would appear to be taking place.
A closer look at management and business studies

Throughout the 1990s there has been widespread expression of concern about the need to educate managers and business professionals in both the immediate practicalities of the environmental agenda and the longer-term implications of sustainability. Progress has, however, been slow, (see, for example, Roome, 1994; 1998). Despite a number of long-standing initiatives designed to encourage both business schools and university departments of management and business studies in the protocols of the environment, surveys continue to show that the educators are continuing to ignore the issues, (see, for example, Forum for the Future, 1999).\(^{16}\)

In many regards, the discipline of management and business studies reflects the issues we have discussed earlier. In general terms, it can be seen as an area of education which is intellectually conservative and tends to reflect the values of the organisations to which its students will aspire upon graduation (see, for example, Davila, 1991). It has a rapidly growing functional specialism that falls within its ambit – environmental management – which has seen an enormous change and development in very few years. Management education, consequently, Roome argued, where it has considered environmental issues at all, has tended to focus on environmental management and almost exclusively ignore sustainability, (Roome, 1994; 1998; and see also Brown and Cortese, 1998).

Environmental management as a subject area is showing all the signs of maturing and is garnering to itself a substantial and increasingly critical, theoretical and reflective literature.\(^{17}\) But, it would appear, this diversity and subtlety about environmental issues is not finding its way into mainstream management education and training.

There is plenty of guidance available to educators who seek it. Roome (1994) reviewed many attempts at developing appropriate courses and curricula and provided examples of outline syllabi. These, in brief summary, are reproduced in Figures 3.2 and 3.3.
Figure 3.2: Institution of Environmental Sciences educational recommendations

All students need to understand:
• the conceptual, temporal and spatial principles of sustainability as these relate to: stewardship, the quality of human life, biodiversity, the earth’s life support systems, the depletion of finite resources and the earth’s carrying capacity;
• the nature of global interconnections, in particular the connections between: western lifestyles and the degradation of the global commons, and poverty, population and environmental degradation;
• environmental values ...
• local environmental conditions ... within the context of local ecological limits and management strategies;
• the college/university’s environmental position ...
• the environmental impact of personal behaviour ...

Adapted from Roome, 1994, p18

Figure 3.3: American Assembly of Collegiate Schools of Business recommendations on environmental education

Both undergraduate and MBA curriculum should provide an understanding of perspectives that form the context for business and should include:
• ethical and global issues;
• the influence of political, social, legal, regulatory, environmental and technological issues;
• the impact of demographic diversity on organisation.

Despite so much apparent support for the development of a substantial environmental component in management education, the UK government still found that the general lack of progress was of concern and initiated a project known as HE21 which was designed to “enable and promote examples of best practice for sustainability in the higher education sector”. (Forum for the Future, 1999). Although aimed at innovation across the disciplinary spectrum, one of its primary foci was upon management education.
The HE21 survey, which is explicitly endorsed by the UK government, again confirmed the slow take up of environmental – and, especially sustainability – issues in management education and concluded with a suggestion of what should be covered in business education. The suggestions are summarised in Figure 3.4.

Figure 3.4: Forum For the Future’s sustainable development education: business specification

**Sustainability concepts:**
At the end of their business programmes, learner should have:
- an understanding of the interdependence of major systems;
- an understanding of the needs and rights of future generations;
- an understanding of the value of diversity;
- an appreciation of the need for caution; and
- an awareness of the limits to growth.

**Sustainability solutions:**
At the end of their business programmes, learner should have:
- an understanding of the role of the business community in promoting sustainable development;
- an awareness of the wide range of sustainable solutions tools and techniques currently available and a detailed understanding of ... [inter alia] eco-efficiency, EMS, environmental reporting, social reporting, LCA, eco-design, stakeholder analysis etc;
- an awareness of sustainable development related legislation, policy and control mechanisms;
- a sense of social responsibility;
- enhanced skills {list follows}.

**Effective sustainability teaching:**
Business educators should be able to:
- understand why it is important for students to learn how to become responsible global citizens;
- devise appropriate teaching strategies relating to sustainable development education ... ;
- track students’ progress in sustainable development education in a variety of areas of learning ... .

Adapted from Forum for the Future, 1999
It is still too early to know whether the HE21 recommendations will have any substantial effect on management/business education. Such doubt remains despite these recommendations being endorsed by both government and by the CEOs of many major British companies. On the evidence we have been able to collate, such a substantial effect seems unlikely. The HE21 survey identified a number of the impediments to the incorporation of (what they referred to as) sustainable development education that we have raised here: lack of time; lack of expertise; and the issues being perceived as of marginal importance. (The list of impediments could be longer still, the World Resources Institute survey in the US added: lack of awareness amongst teachers; resistance by students; lack of interest amongst recruiters; and a general failure to see environmental issues as having any direct career benefit).

It will take more than recommendations to change this situation.

The only profession/discipline that could, on the evidence we have seen, claim to have made any widespread progress in the area is that of engineering; which is, at least in part, a result of the specification of professional requirements. But again here – as with the US experience in management and business – environmental matters are as often as not treated relatively superficially. For sustainability to be a central part of any disciplinary/professional education it seems that some means needs to be found to change the way in which educators and professionals think of themselves and their subject matter. How that change can be achieved is far from clear.

Conclusions

The broad purpose behind exploring other disciplines’ experiences with environmental and sustainability issues had been to learn from them. Implicit in this had been an assumption that other disciplines and professions would experience less – or, at least, different – constraints on their ability to explore and integrate new and innovative ideas. We had anticipated that this, in turn, might well provide us with exemplars
which we could bring to our consideration of accounting education and training. This proved to be a naive assumption.

We find environmental/sustainability issues entering university education through three routes:

• specialist courses based upon functional specialism such as environmental law, environmental management, design for the environment, and so on;
• key enthusiasts bringing environmental issues into both new courses and, to a lesser extent, throughout their teaching; and
• external drivers – especially professional syllabi – which insist on environmental coverage.

None of these appear to be embedding themselves in, and changing the heart of, the disciplines concerned.

Having collated wide-ranging evidence from other disciplines and professions, we are led to speculate that our earlier distinction between ‘environmental’ (‘marginal’) and ‘sustainability’ (‘structural’) issues is a crucial one. If environmental issues are just specific environmental issues – waste or recycling or pollution – (which is the way in which they are most usually represented), then a piecemeal approach looks satisfactory to most teachers. They can see that their disciplines are offering, what must look like, a substantial response to the changing agenda. It is difficult not to have sympathy with that point of view.

If, however, we wish sustainability issues to be considered and embedded into a discipline then a much more substantial change is needed. Currently, few individuals can see what such a radical change might mean and, of those, even fewer are keen to abandon and radically change so much of the core of their educational and professional assumptions. As McPhail (1998) noted, we are asking for a change in the professional’s sense of identity. That is a major task.

As if this were not enough, our discussion has almost entirely ignored many other crucial factors. It may well be that if more teachers can see the need for deeper environmental education and have the knowledge and wherewithal to undertake the task, things may begin
to change further. But this is very unlikely to be enough. To make any real progress in this area it would be necessary to carefully consider the structural and motivational issues as well. Relying on the personal motivations of educators and assuming that they can and are willing to overcome inertia is, probably, rather too optimistic. To rely on this when: educators are already over pressed; they are increasingly monitored; their morale is at an all-time low; their short-term performance is increasingly measured and rewarded; and so on, is naive in the extreme.

And where is the increased volume of material to be placed? Are we to drop material previously thought of as core? As Paisey and Paisey (2000) find, the professional education syllabi are already both highly technical in orientation and cluttered in detail. There is little room in the syllabi of engineering, medicine, law, architecture – it is argued – for substantial new material.

And, finally, if we return to some of our earlier discussion about the nature of education we still have to resolve the question of whether, if sustainability does demand a major re-think of professional and knowledge bases, students inculcated in a critical and radical agenda would be either employable in the profession or capable of taking and passing professional examinations. It seems questionable.

Change is occurring, albeit slowly. The stick of professional accreditation and the like will achieve further movement. Some structural change and a few carrots would almost certainly help matters along at a greater pace.

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**Endnotes:**

1 These arguments echo the USA’s experience with the Accounting Education Change Commission (AECC). This is discussed in some detail in chapter four.

2 These arguments, in themselves, reflect underlying preferences and values. For example, why is it essentially the case that a disruptive workforce or a constantly challenged status quo is a “bad thing”? The answer, presumably, is that it would reduce the economy’s ability to pursue growth and its traditional goals. Under the precepts of sustainability (see later) that is precisely what is required. Thus,
even the more superficial sounding arguments over education have embedded in them essential and fundamental matters of how society is organised and our beliefs about the nature of mankind.

3 Two examples will suffice here. The first is that in our present society the very idea of economic growth was (until very recently) an unchallengeable idea – it was unthinkable that economic growth was not the natural state of things. To the extent that it was thinkable opposition to it was classified as “stagnation” – a pejorative, if inaccurate, apparent opposite to growth. Similarly, until very recently again, to mention the word ‘capitalism’ was to be seen as a ‘communist’. Thus not only could the system under which we operate not be examined and discussed, to try to do so was to find oneself categorised, again, in a pejorative and inaccurate manner. Thus debate is not defeated, it is simply not possible. This is the power in Gramsci’s notion of hegemony.

4 The issues are, of course, more complex than this. The teachers and the institutions of which they are a part are subject to a range of subtle influences (not least of which is their own educational experience) which can, at times, become very pernicious indeed. There is a powerful literature on these matters and they are covered well in Ashe et al (1999); Bourdieu (1977); Eakins (1966); Fogarty (1998); and Soley (1995). For an insight into the role that language, convention and ideology can play – in this case in economics – see McCloskey (1998).

5 One such source of material was the Council for Environmental Education – a joint project between the University of Reading and WWF. As well as producing guidance for teachers, the Council publishes environmental teaching material covering science, geography, English, the arts, design and technology and personal and social education. Furthermore, the schools are required to demonstrate good environmental education and the Council has also published a checklist for schools inspectors – a clear signal of the centrality of environmental issues in education.

6 These are arguments that find a substantial echo in the accounting literature. For more detail see, for example, Puxty et al (1994), Chua (1996), Humphrey et al (1996), and chapter four.


8 See also, in medicine: Abrahamson (1978); Anon (1997); Miles et al (1989); Parker (1995); in engineering: Koehm (1991); Lowe (1991) and comparatively: Paolillo and Estes (1982) for other examples.

9 McPhail (1998) makes a very similar point in the context of medicine – it is not about adding new material to be “learned” but about integrating matters into the “practitioners’ professional identity”.

10 It is worth recording the surprise expressed by an engineering colleague when this view was brought to his attention.
The engineering professional initiative continues. *Habitat* (35.9 October 1999, p2) reports that the Royal Academy of Engineering has appointed four new Visiting Professors in Engineering Design for Sustainable Development. They will work on developing case materials “to get the concept of sustainable development ingrained in the thought processes of all practising engineers ... it should not be seen as a separate issue to be covered in special courses.” For further insight on developments in engineering, see Parkin (2000).

We should stress here that this depiction of the educators we spoke with may be slightly unfair. That is, the conversations were, wherever possible, held with educators who we had come to learn about as individuals who were seeking to develop new issues in their own disciplines – gender and other social issues predominated here. These are not, therefore, ‘inert’ academics and, in addition to the reasons we deduce here, is the obvious point that they were, in general fully engaged in their own projects which they saw as being of at least as much importance as the environment.

This was a rather graphic illustration of the Foucauldian notion of self-disciplinary power in which, for subtle and far from obvious reasons, individuals anticipated resistance to innovation and forebore from it out of some sense of duty (we presume) to the community of which they were part. We found this a startling, but highly plausible explanation and one which, now we come to think about it, has had profound effects on what we, ourselves, teach and say.

It is not immediately obvious that this any different from the characteristic that is present in accounting and most frequently expressed as a concern for the students’ employability and capacity to handle professional examinations.

Although personal experience suggests that this is – or rather has been - an impediment in accounting and finance.

The situation is, apparently, no different in the USA. A World Resources Institute survey finds that “environmental issues are rarely incorporated into the core curriculum of business schools”. (Reported in *Financial Times* Monday, February 1, 1999, p13.)

See, for example, Welford (1997a); (1997b); (1998); Welford and Starkey (1996).

World Resources Institute, *op cit.*
Although the teaching of environmental (and social) accounting in universities has grown steadily in recent years, it still remains a relatively minor activity. The reasons for this vary (as we shall see later in this chapter and in chapter five). However, prior attempts to explain the current state of environmental (and social) accounting teaching have, quite appropriately, argued that one cannot make sense of this one area in isolation from the current state of accounting education more generally. The significance of this is that one does not need to look far to come across widespread disquiet about the current state of accounting education in universities. Such disquiet is expressed by academics, professionals and employers alike. It is the purpose of this chapter to briefly review the causes of that disquiet in order to provide a context for our initial examination of the state of play in environmental (and social) education.

Although it is, in part, artificial to try to separate the (university) education and the (professional) training components of an accountant’s educational and knowledge base, this is what we have attempted to do. As the UK accountancy bodies have such widely disparate policies on both graduate and accounting graduate entry, to talk about education and training together would either lead to considerable confusion or encourage us to concentrate only on the ICAS situation. The split is thus partly motivated by practical matters and a desire for clarity. More persuasively to our mind, however, it is typically thought to be the case that university education and professional training do (and should) have different objectives (see chapter three). They are also delivered by (to a not-insignificant extent) different groups of teachers with their differing objectives, and university educators and training providers are likely to
operate under different constraints. These seemed sufficient reasons for attempting some degree of separation between our consideration of the universities and our exploration of the profession.

Consequently, this chapter will attempt to provide a brief review of the current state of play in university accounting education, explore some of its current challenges and then briefly consider some of the barriers to change. (In this last point the chapter draws upon a distillation of the US experience with the Accounting Education Change Commission). The chapter then provides a brief outline of the link between environmental (and social) accounting and accounting education more generally and, in so doing, offers a short background to the more empirically focused material reported in chapter five. (Chapters 6 and 7 will repeat this pattern with Chapter 6 looking at the general issues surrounding the profession and its training experiences and Chapter 7 reviewing the research work we undertook with professional and practitioner colleagues).

**State of accounting education**

There has been disquiet about accounting education for some considerable time² and the arguments ring as relevant today as they did when first voiced.³ The causes of the disquiet, although not unrelated, are not entirely homogeneous. They tend to fall into three areas of concern:

- too much rote and/or shallow learning;
- insufficient intellectual and/or ethical development together with a lack of critical intellectual independence; and
- inappropriate preparation for employment.

We will briefly review these three areas in this order as the final area provides a convenient link through to the profession’s criticisms of university accounting education.
Rote and/or shallow learning

... students are indoctrinated in the rules of extant practice and are seldom exposed to the historical background or institutional framework that has shaped current practice ... (Zeff, 1989b, p167 emphasis added)

Perhaps the most frequently voiced and most widely-held anxiety is that university accounting education places too high an emphasis on students passively learning what is currently thought to be the knowledge of accounting. There are several dimensions to this.

In the first place the conventional accounting syllabus is both technical in orientation and contains an exceptionally wide amount of material ‘which has to be learnt’ (see, for example, Paisey and Paisey, 2000). The very act of acquiring, applying and retaining (for however brief a period) such a range of technical material tends, it would seem, to encourage a shallow and non-interactive approach by teachers and rewards a shallow and passive approach by students. Indeed, if it is thought by teachers (and students) that a significant level of detail of, for example, the Companies Acts, the current rules of taxation or the extant accounting standards must be ‘known’, there seems little option but to adopt passive and shallow learning.

In the second place, there are large swathes of accounting (most especially financial accounting) which do not possess a coherent and consistent theoretical basis. The consequence of this is that there is no substantial ‘conceptual framework’ which can be explored and understood by students of the subject and from which the detailed issues and applications can be logically deduced. This point is made by, *inter alia*, Page and Hopwood (1986) and graphically argued by Gambling:

*The fact of the matter is that because there is no backbone of theory, nothing survives as a foundation for what follows it. Our cognitive material is not cumulative. ... Thus accountants have to learn totally new boxes of tricks every few years, and after you have learnt*
seven or eight such sets, you find it hard to be sure which set it is you remember. Perhaps that is why the subject itself cannot really grow into proper specialisms, it’s just pulled up and replaced from time to time. ... If there is not a basis of theory, what is it that we claim to know as this body of cognitive material on which we examine people? (Gambling, 1983, p110).

It seems inevitable, therefore, that rather than there being a systematic, critical development of students’ intellectual facilities, the only way in which competent mastery of the core of accounting can be achieved is through rote and shallow learning. Indeed, it seems highly plausible that only through such passive learning could students become inculcated in the essences of accounting knowledge. By contrast, (as we shall argue later) it seems likely that any significant development of independent critical thinking would make the acceptance and, hence, learning, of the material problematic – if not impossible.

The anxiety must be that students are not encouraged to question (are perhaps even discouraged from questioning) the material that comprises the bulk of the accounting (and, indeed, finance) syllabi. More significantly still, the evidence appears to suggest that students are not educated in how to question syllabi material. Any student who insisted on asking (and demanding answers for) perfectly reasonable questions would find him or herself facing a very difficult task in attempting to complete and pass an accounting course. But that is not the worst of it. Altogether more worryingly, most students would not know how to ask such questions or, even, that such questions existed.

Crucial to the discussion, therefore, is whether or not accounting students are encouraged to develop independence of mind.

**Intellectual and ethical development and independence of mind**

Teaching to be really educational should, therefore, aim to provide such stimuli for the student that he (sic) goes forward seeking an understanding of the principles of his subject rather than sitting
back smug in the knowledge that he ‘swatted’ the correct material for his examination. (Chambers, 1948, p322)

Everyone agrees that graduates should be able to think critically, relate to others, make ethical judgements and communicate (AECC, 1999)

If the sine qua non of university education is the development of individuals’ intellectual and moral maturity and the encouragement of critical independent thinking, then the evidence in accounting education is fairly damning. A diverse range of arguments all point to various symptoms associated with a less than healthy educational process. Accounting education in the universities will produce, it seems, ethically immature, intellectually naive, ill-educated, non-reflective, uncritical minds who will, by and large, accept what they are given and reproduce what they are given without any critical engagement with it. These are the characteristics that Zeff (1989b) and Loeb (1988) both refer to as ‘indoctrination’. Neimark puts it more bluntly still:

... few truly liberally educated students could swallow uncritically the theology of markets, privatisation, competition, individualism, social Darwinism, and so forth. (Neimark, 1996, p7)

The crucial issue is not that, for example, acceptance of the underlying political, ethical and social assumptions of accounting and finance is necessarily improper but rather that it is the unquestioned acceptance of such things that is wrong. An accounting student would not, on the whole, be able to either justify why they subscribe to, for example, the assumptions of capitalism, ‘free markets’ or taxation minimisation or to provide a cogent critique of alternative assumptions. Generally, such a student would simply be unaware that moral and social choices lay beneath their acceptance of the world according to accounting and/or that cogent alternatives actually existed. (For more detail see, for example, McPhail and Gray, 1996). This is, indeed, indoctrination and illustrates our discussion (in Chapter 3) of the power of hegemony.
Accounting education would appear to be a significant element in the maintenance of that hegemony.\textsuperscript{8}

The bulk of the criticisms reviewed above derive from academics and the concerns that those scholars hold for accounting education. Following the distinction that we discussed in the previous chapter, the problem may be no more than conflict about whether accounting education should be ‘transcendent’ or a preparation for vocational education and training. The current situation would be a great deal simpler if this were the case – but it is not.

**Preparation for employment**

There would appear to be two, apparently conflicting, views held by practitioners about the output from university accounting education.\textsuperscript{9} These views may be conflicting but they share one point of agreement – neither is content with the students that emerge from university accounting education.

On the one hand, commentators claim that many employers find accounting graduates ill-prepared for the world of work, (see chapter seven for more a detailed examination of this). Not only do accounting graduates fail to exhibit the social and general skills that employers appear to want but graduates tend not to be sufficiently expert in basic accounting and taxation procedures to slip directly into gainful employ. This situation is, it would appear, worsening as the accounting ‘profession’ attempts to evolve and re-invent itself as a flexible, expert business-support service.\textsuperscript{10}

On the other hand, commentators from (or closely associated with) practice have echoed the criticisms from academe in regularly commenting upon the tendency for accounting graduates to be inculcated in rote learning with little or no experience of wider, developmental education. In this regard, accounting graduates are viewed as less attractive than non-accounting graduates. Three observations express this point of view:
Professional examinations must encourage students to think about the wider social and economic debates which affect accountancy. ... The legitimacy of the profession rests on serving the “public interest”. Yet one will look in vain for the professional syllabuses which promote any discussion of this. (Ravi Gill, a professional accountancy trainer, in Accountancy Age 25 February 1993, p10)

It is almost too easy for a professional body to indirectly dictate, for example, the undesirable practical, vocational kind of education ... through its lists of educational requirements and by the kind of questions included in the examinations that graduates are required to pass before being admitted to membership. It is also possible for professional bodies to overlook new topics and subjects ...[and] when newer desirable areas are not listed, older and less relevant topics and subjects are more likely to clutter their lists. (Gynther, 1983, pp6/7)

... the Statements that we have issued ... have tended to become the central focus of some accounting courses ... Unfortunately, that focus ... appears to have driven out other materials that might well have been more useful to students. As a consequence ... intermediate accounting seems to be devoted to “learning the rules”... Because conceptual analysis and critical thinking endure much longer than individual accounting standards, students run the risk of becoming functionally obsolete not long after they graduate. (Beresford and Johnson, 1995, p108)

Many, it would seem, are unhappy with university accounting education.

However, it does seem to us that to adjudge all university accounting education as ‘wrong’ or ‘worthless’ would be both harsh and incorrect. It does seem inescapable that accounting graduates are neither liberally-educated individuals with a well-developed capacity for critical, independent thought nor satisfactorily trained ‘for the job’. The problem, arguably, is not so much that accounting graduates fail to fit
one or both of these models but that they fail to fit either of them. On the face of it, accounting education in universities might be thought of as a compromise between the two extremes. As such, the universities are doing neither very well.

But the issues are even more confused than this. Even if accounting education is producing students who are neither fish nor fowl, it is not possible (from the literature reviewed earlier) to conclude, with any real confidence, whether all accounting graduates exhibit this compromised education. For example, it may be that some students are well-trained whilst others are successfully inculcated into a critical awareness. Alternatively, it may be that students can exhibit critical reasoning in some areas of the discipline and are well trained in others. From the evidence available, this may be unlikely but it remains a possibility.

This question is of some significance because university accounting education may be achieving something altogether more subtle. That is, university accounting education may very well be successful in inculcating students into the current norms and mores of the accounting profession. This point has been made on a number of occasions but is, perhaps, most persuasively argued by Houghton and Hronsky (1993) who concluded that accounting students are successfully imbued with the “cognitive structure” of the practitioner – even if the detail of the practitioners’ world is still missing.

So, whilst there is widespread disquiet about accounting degrees, there is a genuine conflict about the source of that disquiet and, strictly speaking, the evidence (whilst convincing at a general level) lacks sufficient detail and specificity for really robust and unequivocally useful conclusions.

Perhaps it is this equivocation – even this lack of clarity – which has led, in turn, to the continual re-examination of both accounting education and accounting training. Not only have the professional accountancy bodies continually re-examined their own needs in accounting education and training (see chapter six) but university accounting education has been subject to significant scrutiny. The
Accounting education change and the AECC

The experiences of the United States in accounting education should, on the face of it, provide useful insights into the alleged malaise in accounting education, its causes and its cures. Not only is the accounting profession in the US large and well resourced, it has a long and impressive history of accounting teaching and research. The US profession is a graduate-only profession and the profession has, historically, looked to accounting educators in the universities and colleges to supply these graduates. There is, perhaps, greater diversity of routes to graduation in the US than in, say, the UK. The diversity of, *inter alia*, two-year colleges, liberal arts colleges and business schools makes the situation a little more complex than is always immediately apparent. In addition the accreditation of CPAs and their educational requirements is a matter for individual states and this, in turn, leads to some diversity of educational requirements for professional membership. The US profession is dominated by, in particular, the AICPA and CMA – so there is a further, inevitable, tension over the vocational direction of graduates – although that diversity is nowhere near as extreme as in the UK (see chapter six).

In addition to the sheer size and dominance of the US accounting profession, it is relevant to this study because of: the way in which re-appraisals of accounting education appear to be joint efforts of academics and practitioners (as a direct function of the importance of university educated accounting students); and the highly visible and apparently influential nature of the critiques and re-appraisals.
The disquiets discussed above are central to the debates and initiatives in US accounting education and are captured by Mueller when he says:

Memorizing and regurgitating more and more rules and standards and regulations is not the answer. Sensitivity to underlying basics, critical analysis of new facts and events, plus continuous streams of learning seem more plausible solutions. (Mueller, 1994, p13)

Sterling (1973), Ferrera (1975), The Bedford Committee Report of 1985, Previts and Schultz (1989) are just some of the influential reports which struggled with the problem of how to avoid forcing students into vast quantities of rote learning and try to develop an educated accounting graduate entry. These concerns were crystallised in 1989 by the (then) Big 8’s anxieties which resulted in the highly publicised and well-resourced AECC.

Without going into detail, the AECC tried to turn attention to preparing students “to become professional accountants, not to be professional accountants at the time of their entry to the profession” (AECC, 1990, p1). This ambition, they argued, could be sought through “life-long learning”, “learning to learn” and “concern for the public interest”. The mechanisms for this would be funding for experimental, innovative, undergraduate programmes and the extension of the accounting degree from four to five years, (the “150 hour rule”).

The predominant view amongst academic commentators would appear to be that the AECC has been largely unsuccessful in achieving the change it sought. (It is worth emphasising that, by way of contrast, the AECC’s CD-ROM issued in 1999 paints an altogether more glowing picture of an essentially successful innovation.) The reasons offered for the apparent failure are extensive. In the first place, the initiative was not universally applauded - non-AICPA accountants and those from firms outside the (then) Big 8 being less than sanguine (Reider and Hester, 1994). Of more significance were the structural
impediments to change. Patten and Williams (1990) and Nelson (1995), for example, both offer a fairly comprehensive and persuasive list of factors. As they see it, faculty reward schemes, the status of teaching, the nature of textbooks, the CPA examination, accreditation, the relative ease of technical versus innovative approaches to teaching, students’ expectations, the costs and difficulties of change and the nature of accounting academics themselves were all just some of the factors which go to ensure that innovative change simply does not happen.

This literature paints a depressing picture of a static, change-resistant, publication-obsessed community with little or no interest in education. And whilst that might, perhaps, be too harsh a conclusion (there are after all, many innovative and dedicated educators in North American accounting education), it is a picture which has been echoed to varying degrees in, *inter alia*, the UK, Canada (CICA, 1986) and Australia (DEET, 1990).

It has become relatively clear that the failure (if that is what it is) of the AECC – and, indeed, of other attempts to ‘solve’ accounting education – results from three factors: a lack of any real clarity over the ‘problem’ to be solved; a failure to explore the causes of that ‘problem’; and a resultant failure to address the underlying issues that were causing the problem and resisting its solution. It is instructive, therefore, to note in passing that the claims made by the AECC (1999) for the success of the initiative lie entirely – as far as we could assess – in its focus on the employability of accounting graduates. By seeking to solve *that* problem, the AECC would appear to have ignored the other concerns over “transcendence” which are the primary concern of academic commentators.

**What is the ‘problem’ in accounting education?**

It would be an act of unwarranted optimism to attempt to provide any definitive explanation of the ‘problem’ in accounting education in a few lines. Nevertheless, it appears from the foregoing paragraphs and
chapters that an understanding of the limitations and difficulties of university accounting education is central to any attempts to change that education – in the present case, to incorporate environmental issues.

What is also apparent is that the problem is more complex than the influential, typically US, reports have recognised. The problem is a potent brew of: teachers’ interests, expectations, motivations and training; the relationship between teaching and research; the current university environment; students’ characters, abilities, motivations and expectations; recruitment practices; the views and activities of practitioners; the professional syllabi and the examination processes; the pronouncements of the professions; the tensions between academe and practice; and, perhaps most importantly of all, the very nature of accounting as it is currently understood and practised. If we add to this an explicit recognition that the professional bodies, practitioners, teachers, researchers and students are neither homogeneous groups nor consistent in their views over time, it is apparent that we have either a very complex problem or a series of (non-trivial) problems.17

In all probability, there can be no single solution to this problem. But it seems highly plausible that there are a number of factors without which no solution is possible. These factors include:

- explicit recognition by the universities and the professional bodies of the relative roles of the education and training elements for new accountants;
- explicit and honest statements by university academics as to what they see as the primary function of university education;
- a very clear (and honest) assessment of the role that accreditation plays and the extent to which it does – or does not – constrain accounting degree teaching;
- explicit re-examination of whether accounting is (and wishes to be) a profession or a trade association;
- explicit exploration of how material is taught – what is taught and over how long appears to be less important than the manner in which it is taught and the educational relationship of the teacher and student;
• clear and open discussion on matters which are central to accounting education and on which there is crucial conflict including:
  - the nature of critical thinking and whether the profession is willing (and able) to embrace the results of such thinking;
  - acceptance of and exploration of the consequences of there being no central and coherent theoretical framework for accounting;
  - how does – or can – accounting actually serve the public interest?
  - to what extent accounting is unquestionably client orientated?
  - how can the moral, political and social issues embedded in accounting be made more explicit and more amenable to discussion?

There are, clearly, many other equally weighty matters that could be listed here (and, indeed, we will return to these and other issues in later parts of this report) but these points should suffice to illustrate some of the very basic matters which seem to lie at the heart of the education debate and without acknowledgment of which, accounting will continue to lurch from educational crisis to educational crisis.

These are also, and not surprisingly, the sorts of issues that emerge when environmental (and social) education is considered.

**Environmental accounting in the universities**

Despite a (relatively) long history of arguments supporting and encouraging the introduction of environmental (and social) accounting into accounting degrees (see, for example, Bedford, 1969; Estes, 1975; Brummet, 1975; Mathews, 1995a) it is only in recent years that there has been much in the way of significant (observable) development. (The most obvious observation is that this reflects a largely predictable response to changes by the profession.)
The literature concerned with why environmental (and social) accounting should be taught in universities has tended to concentrate on the introduction of dedicated full- and part-courses (as opposed to occasional lectures within other courses) and the educational value of these. (The more educationally-defensible – if more radical – issue of integrating social, political and environmental issues throughout the teaching of accounting has, it would seem, been eschewed by commentators as just too radical. There has, it would seem, always been a pragmatic streak in social and environmental accounting teachers and researchers – see Tinker et al, 1991).  

The arguments have, as a consequence, centred around what are perceived to be the benefits of social and environmental accounting teaching. These benefits have, in turn, been seen as offering potential solutions to many of the criticisms leveled at university accounting education. That is, social and environmental accounting teaching may, it is argued:

- hold a mirror up to conventional accounting thus enabling students to better understand the principles and limits of the subject;
- offer an alternative type of accounting whose very existence questions whether or not accounting as currently practised is fundamentally mis-specified;
- allow students to introduce personal values to accounting and integrate their personal and professional lives to a greater extent;
- sensitise students to social, environmental and political issues;
- integrate and examine ethical reasoning in an accounting context;
- encourage independent and critical reflection; and
- examine practice outside the conventional domain of the profession.

On the face of it, these claims look as though they go some considerable way to counter one part of the criticisms levelled at accounting education. (Sefcik et al, 1997; even go so far as to suggest that environmental accounting meets all of the four goals of accounting
education identified by Patten and Williams, 1990.) If one were naive, one might therefore think that this would be sufficient reason for academics to embrace social and environmental accounting education as a major element in their teaching. Of course, and as we have already seen above, it would take a great deal more than just academic argument, no matter how sound, to shift university teaching in such a major way.

This is what investigation into the state of environmental (and social) accounting education has demonstrated. Owen et al (1994) and Humphrey et al (1996) summarised the state of play in the UK in the following way:

- environmental and social accounting are seen as peripheral elements of accounting as opposed to ‘core’;
- the teaching of such material is not widespread and depends almost exclusively on the activities of key individuals who are also probably researchers in the field;
- all teachers who taught environmental and social accounting and were included in the research were unanimous in their belief about its pedagogic value.

The principal impediments to the development of environmental and social accounting teaching were summarised by Humphrey et al (1996, p83) as:

- the influence of the professional bodies, notably through the accreditation process. This had the particularly significant effect of determining what was ‘core’ in accounting and what was (and was not) appropriate in ‘real’ accounting education;
- the pressures under which academics and universities operate. The pressures include funding constraints, an increasingly ‘market-driven’ ethos as well as the pressure on research output.

These conclusions are largely echoed elsewhere. Lyall (1985), for example, found that industry and the profession saw environmental accounting (along with accounting theory, social accounting and behavioural issues) as being of very low importance to accounting
education. More recently Watt (1998) found that there was now widespread belief amongst academics that environmental accounting should be part of both university education and professional training but that factors such as professional requirements, time constraints and lack of employee and student demand provided strong disincentives to its development.

One of the major purposes of the research for this report was to explore the extent to which these views and constraints continued to hold and to try to explore, in a little more depth, why the situation continues as it does. That is the purpose of chapter five.

**Conclusions**

As university teachers ourselves, collating and synthesising the material for this chapter has not been a particularly pleasant experience. In our view, the evidence indicates that it is increasingly difficult to escape from the conclusion that university accounting education has a major problem - it appears to neither develop a critical-thinking, independently-minded, liberally educated graduate nor to produce the vocationally-trained job prospect that many employers appear to want. This situation would appear to be more acute in accounting than it is in other professional disciplines. In so far as it is possible to conclude, it would seem that accounting graduates are individuals who have either been prepared for the professional examinations or whose education is a (largely unsatisfactory) compromise between the ‘transcendent’ and ‘vocational’ objectives. We are led to infer that in trying to do both, university accounting education may achieve neither.

More puzzling, but equally concerning, it appears to be the case that university accounting education is singularly resistant to educational change if not driven by professional body accreditation initiatives. The factors encouraging inertia seem legion.

Such compromise and inertia seem sufficient explanation for the relative paucity of environmental (and social) accounting education despite the *a priori* arguments that such education would go a long way
Accounting Education in the Universities:

to solving many of the more educationally-related disquiets about the current state of accounting education.

But, arguably there is one key to the whole area which consistently fails to emerge at the right place and time when accounting education is being discussed. This is the central and fundamental question of what accounting education is really for. There probably is not – nor could be – any simple answer to this but there are key matters which probably need to be addressed before any serious progress can be made. These issues include: the nature of accounting itself; the current attitudes and backgrounds of accounting educators; clear guidelines as to the respective roles of university education and professional training; and the profession’s (un?)willingness to tolerate truly critical questioning.

These and related matters will be revisited as the report develops. A closer examination of the views, attitudes and actions of university teachers and students follows in chapter five.

Endnotes:


2 One important issue is whether the critiques we will review here are peculiar to accounting or whether they apply equally to all university subjects. Comparative studies are still fairly rare but there would seem to be some broad comparability between the concerns expressed in accounting and those expressed elsewhere – especially when related to professional/vocational subjects. Not only will elements of this chapter echo some of the points made in chapter three but studies such as Paisey and Paisey (2000), McPhail, (1998) and Paolillo and Estes (1982) also point to broad similarities. However, with the possible exception of medicine, our work for chapter three did not unearth the same extent of detailed and anxious critique of the education process in other disciplines. In addition, there is certainly some circumstantial evidence (on, most notably, ethical maturity) in which accounting seems to be particularly vulnerable to criticism. This is an area which deserves some careful further research but such research fell outside our ambit for this research report. However, regardless of the comparative standing of accounting education, it is apparent that there is a significant array of concerns about accounting education which are of sufficient importance to warrant our attention. In what follows there is, therefore, no significant assumption
that accounting is, somehow, better or worse than other subjects.


4 There are a myriad of such questions. Some which come to mind include: why do we use accrual sometimes and prudence at other? what is a balance sheet for? why do we help investors maximise their wealth – it says nothing about this in the Companies Acts? how does accounting serve the public interest? why is profit regarded as a measure of success rather than as a cost to customers? why do we follow accounting standards? why do we seek to minimise tax liability? why do we ignore unemployment, social and environmental issues when we are appraising investments? is it morally right to motivate and control a workforce? why double entry? how do we defend our cost allocations? etc.


8 See, for example, McKernan and O’Donnell (1998); Frankfurter and McGoun (1996); Chua (1996); Sikka et al (1995).

9 This issue of practitioners’ views about and expectations of accounting graduates is explored in more detail in chapter five.

10 See, for example, Melancon (1998); Patten and Williams (1990); Leong and Wagner (1990); as well as the material from the professional bodies reviewed in chapter six.

11 Beresford and Johnson were speaking as members of the FASB.

12 Zeff (1989a) has famously questioned whether accounting – as currently taught – deserves its place in universities.

13 That accounting graduates leave university to take up a wide range of different appointments and that, even in terms of accountancy training, these appointments involve a very diverse range of activities and skills clearly makes the problem a great deal more complex. That is, there is no single type of accountant that even the most vocationally-orientated commentators have in mind.

14 For example, the McPhail and Gray (1996) results speak convincingly of an increasingly homogeneous accounting student body.

15 There are many good reviews of the AECC – Davis and Sherman (1996) and Nelson (1995) are particularly stimulating and thorough treatments.

16 This view came through strongly in our discussions with North American accounting academics.

17 For discussion along these lines see, for example, Bedford (1969), Coe and Merino...

18 This echoes the Foucauldian self-discipline which emerged in the discussions with educators from other disciplines in chapter three. Social and environmental accountants have regularly been criticised by more conservative colleagues for radicalism and by more radical colleagues for conservatism. It all depends on your point of view, it would seem.

19 For more detail on these arguments see, for example, Blundell and Booth (1988); Lewis et al. (1992); Gray et al. (1994); Owen et al. (1994); Mathews (1995a); Humphrey et al. (1996); Bebbington (1997); Gordon (1998).
 Chapters two, three and four sought to provide the background material for this report. In particular, those chapters explored: the key issues involved in any serious consideration of environmental issues; the current state of play in environmental education generally and the experiences of other professions; the tensions involved in university accounting education; and prior research into experiences with environmental (and social) accounting education. This chapter takes matters a stage further and building on, in particular, the research of Humphrey et al. \(^1\) seeks to explore the issues a little more closely. It does this through a reporting of some of the empirical work undertaken for this research report and, in particular, that which concentrates on the views and activities of teachers and students in UK university accounting departments.

The purpose behind the empirical work undertaken for this project was to try to capture a wide flavour of the activities and views of the main actors in the delivery and policy of accounting education and training. The thinking here, as chapter one explains, was that there are significant interactions between all the major groups involved – and there was no reliable reason to privilege the views and opinions of any one group over all others. This chapter therefore concentrates on the major groups, as we saw it, within the university: senior academics and heads of departments; those involved in teaching and researching environmental (and social) accounting; and accounting undergraduate students who had taken, might take, were taking or had avoided taking courses in environmental (and social) accounting.

The chapter is therefore organised as follows. The next section provides, first, a description of the state of teaching of environmental
and social accounting in UK universities and then reports briefly on the reasons for the existence of such teaching and the perceived motivations of, and impediments to, teachers providing such tuition. The chapter then reports on an in-depth exploration of why students do – and do not – choose to take environmental (and social) accounting options available to them. Finally, the chapter provides a discussion of the views of senior academics and heads of departments with whom interviews were held.

The conclusions do not offer any major contradictions with the extant literature discussed in the foregoing chapters but they do – we believe - provide more depth and detail than was previously available. In brief, the findings support the view that the central conundrum is not to do with environmental issues but to do with: the nature of accounting; the expectations and pre-dispositions of students; the training and attitudes of accounting teachers; and the relationships between universities, academics, practitioners and the profession.

**Current state of environmental accounting teaching in UK universities**

The empirical work undertaken for this project included a questionnaire survey which replicated and extended an earlier piece of work by Owen et al (1994).² Owen et al undertook a questionnaire survey of UK university accounting departments to assess the state of play in social and environmental accounting teaching in 1992. This section reports on those results and compares them with the results of a replication of the Owen et al survey carried out in 1998 with the intention of finding out whether much had changed in those six years.³

Owen et al received 60 replies (76%) from their circulation of UK departments of accounting and from those identified seven full courses and 15 part courses dealing with social and environmental accounting. (Part courses refers to courses where more than 10% of the student contact time was devoted to social and environmental accounting issues).
Of more impact, they were able to conclude that 64% of departments offered either no social and environmental accounting or the equivalent of less than 10% of a course. The present survey produced 45 replies (44%) and identified eleven full courses and twelve part courses with 49% of departments offering no or negligible social and environmental accounting teaching. In both cases the courses were more or less evenly spread across ‘new’ and ‘old’ universities. In broad terms, although there would appear to have been a slight development from part- to full-courses, the change is hardly so striking as to be worth getting excited about. Similarly, Owen et al found the full courses to be almost exclusively optional for students whilst the part-courses were split between optional and compulsory. The present survey found much the same.

Of more import to the concerns of this report, the surveys sought teachers’ views on such issues as: the aims of social and environmental accounting teaching; reasons for not offering courses in the area; and the facilitators and impediments to developing and implementing such courses. We tentatively conclude that there may have been some movement here – but much of that possible movement is not easy to interpret.

Aims of social and environmental accounting courses

Both surveys identify that the primary aim of social and environmental accounting teaching is perceived to be the enhancement of students’ awareness of the social and environmental obligations of corporate behaviour. They also agree that a subsidiary aim is to study the economic and social consequences of accounting. Equally, they both identify the aim of reflecting the political and social beliefs of academic accounting staff as being the least influential of aims.

The surveys do, however, point to some changes in the intervening six years. The most striking of these were that the aims to facilitate the development of improved ways of accounting in organisations and to fill a gap in students’ accounting education both rose from relative obscurity in the Owen et al survey to, respectively, 4th and 2nd place (out of ten) in our survey. It takes little imagination to see a greater recognition of
the functional possibilities of (especially) environmental accounting at work in the first of these and a growing perception of the acceptability of (especially) environmental issues in the second. The changes in the relative ranking of these aims were more striking with the part-courses than with the full courses. The most apparent relative change within the full courses appeared to be a decline in the importance of the critical accounting theory agenda – but this could easily be a function of sampling difference in the surveys.

Reasons for not offering courses in social and environmental accounting

Both surveys identified two of the most pressing reasons for not offering social and environmental accounting courses as “staff do not feel sufficiently knowledgeable to teach the subject” and “staff do not wish to teach the subject”. But two major – and probably significant – changes are apparent between the two surveys. First, Owen et al reported that all the reasons for not offering courses scored three or more on a five-point Likert scale (where one equalled very relevant and five equalled not relevant). The obvious implication being that there really were no reasons for not offering these courses. Our survey echoed this to a degree – there were no reported means lower that 2.64 – but the “lack of knowledge” reason had risen by the time we conducted our survey to be fairly relevant. This might perhaps suggest that (especially) environmental accounting is seen as being more complex and developed than previously.

Contrarily, however, Owen et al had ranked the technical/quantitative nature of accounting as the least important of their reasons for not offering social and environmental accounting courses but it rose to the third ranked reason in the present survey. We have no obvious explanation for this.

The results of the two surveys suggest that there is no strong and explicit awareness of resistance amongst accounting teachers to the introduction of social and environmental accounting teaching.
Factors facilitating the introduction of social and environmental accounting teaching

Both surveys identified only three ‘facilitators’ (ie factors which scored below three on the 5-point Likert scale). Owen et al reported – and, indeed, bemoaned – the increasing importance of environmental issues within both national and international agendas as the clearly most dominant factor facilitating the introduction of social and environmental accounting courses in the minds of accounting teachers. Our survey confirmed this. Both surveys also gave weight to the presence of social and environmental accounting issues in the academic and professional journals. However, there were two major changes over the five years. Owen et al’s identification of the growing demand from students ... as a major factor had disappeared from our survey and was, in fact, the lowest ranked of factors. On the other hand the presence of research-active staff in the area had been an irrelevance in 1992 but emerged as significant in 1998.

The impact of two factors proved to be somewhat puzzling – as much to Owen et al as to us. The factor an acknowledgement that social and environmental accounting issues are a key part of the core accounting curriculum generated indifferent responses in both surveys. (This may, however, have related to an ambiguity in the question, of course). However, significantly, the perception of this factor had not, apparently, changed in the six intervening years. More striking, however, the factor a growing interest in, and concern with, environmental accounting issues by practising accountants was also treated with indifference in both surveys. The only exception to this was that in our survey, this was a significant facilitator for the full-time courses. Does this suggest that the greater interests in and importance of environmental issues in accounting has not fed through to the general teaching community and, rather, those teachers that do teach the subject do so regardless of what is happening in practice? It is difficult to say from the data but tentative conclusions that do seem possible are that: researchers have more control over what they teach; there is greater pragmatism in the justification for that
The Provision of Education and Training

... teaching; and the increased recognition of the environment in practice has encouraged or allowed the increase in the number of full-time courses.

This aspect of the full-time courses was the only striking difference between the full- and part-courses to arise here. The only thing that seems perfectly clear is that early optimism about increased student demand for courses has, with retrospect, looked to be entirely unfounded. (This is an issue we return to later).

Perceived impediments to social and environmental accounting teaching

The pattern of conformance and difference between the surveys that we have seen earlier, continued, in a broadly similar manner when we asked about the impediments that teachers saw as factors preventing the development of social and environmental accounting teaching. A striking result from both surveys was that no factors were scored below three on the five-point Likert scale (where one equaled significant and five equalled not at all). Thus, strictly speaking, the teachers in both surveys do not see any impediments to the introduction of social and environmental accounting teaching. This could be a puzzling and, indeed, troubling result (given how little actual teaching takes place) were it not for one of the themes which earlier chapters have touched upon (and to which we will return later). That is, if most accounting teachers simply never see environmental issues, are not interested in them, don’t “see the point”, are so imbued with the extant hegemony of accounting thought, or whatever, then there is no more impediment to teaching environmental accounting than there is to any other issue that is not perceived to be obviously relevant. It simply neither crosses peoples’ minds nor strikes them as being of any personal significance.

Be that as it may, the differences and similarities between the surveys are not without interest. For example, both surveys identify students’ perceptions of: how social and environmental accounting might relate
to their career; and whether or not it forms part of the core accounting
curriculum as the most likely impediments. Equally, both surveys also see
students’ perception of the political views that social and environmental
accounting (may be thought to) embrace as entirely irrelevant. On
the other hand, the surveys suggest a difference in attitude has taken
place with: colleagues now more likely to feel that a lack of knowledge
of the area is an impediment to such teaching; and a concern over a
lack of academic rigour in the subject – which Owen et al identified as
potentially important - having now disappeared as of any importance at
all. (Some reassurance in the research instrument is possibly provided
by these results which, for the present survey at least, directly conform
with the above discussion on reasons for not offering such courses).

Of some potential significance, it is also worth noting that Owen
et al found that, for the departments offering part courses, the major
impediments were that colleagues did not see it as part of accounting
and that students had not been previously introduced to the area. In
our survey, these no longer appeared to be of any potential importance
and it is not clear that it would be sensible to try to infer much from the
(slight) differences between full and part courses.

Content of social and environmental accounting courses

In so far as it is possible to judge, there does not appear to have
been movement in course content in the last five years. Environmental
accounting dominates, followed by social accountability, theory of
social accounting and social reporting. Environmental accounting is
still the most popular aspect in the field and, if anything is changing,
it is perhaps a movement away from social reporting towards both
‘social audit’ and, possibly, some of the more emergent aspects of the
environment. It is here where we need to be a little cautious in drawing
conclusions in that our survey included additional items – notably
sustainability, environmental management/management accounting and
environmental accounting in financial statements. These aspects were
all revealed to be of some significance in the current teaching of social
and environmental accounting but were not included in the Owen *et al* survey. Many of the ‘older issues’ of social accounting – notably collective bargaining, human asset accounting and not-for-profit accounting have remained relatively unpopular.

There is little to be learned – as far as we can tell – from the distinction between full and part courses here except that environmental management features more strongly in part courses than it does in full courses. We have no evidence with which to draw any conclusion from this but maybe this represents a sign of the integration of environmental issues into management accounting courses through environmental management.

There were other aspects covered by the questionnaire (Stevenson, 2000) but most were not directly relevant to our concerns here. Only one element related to respondents’ research efforts seems to deserve reporting here. A consistent theme in the literature of social and environmental accounting has been the importance and desirability of linking one’s teaching and research. Owen *et al* remarked on the number of researchers in the field (between 25% and 30%) who do not teach the subject. From our survey results its seems that this has not changed in any substantial way in the last five years. It still remains the case that only those whose principal, even dominant, research interests are in social and environmental accounting can be reliably expected to also teach the subject. And finally, one possibly surprising item in the data was that a marginally greater number of teachers who responded to the questionnaire said that their principal research interest was social rather than environmental accounting. Whether this is a question of sample bias or evidence of yet another change in emphasis it is not possible to say.

Taking the comparison of our survey results with those of Owen *et al*, we were surprised by how little change there had been in six years. There would appear to be slightly more activity and slightly less resistance to the subject but there is little evidence that teaching has changed to reflect the much greater prominence that environmental accounting, in particular, occupies on accounting and management agendas.
One of the few changes we did note, however, related to the reduction in teachers’ expectations of student demand for courses in environmental and social accounting. Student attitude as well as student demand surface constantly as major factors in the slow development of social and environmental accounting teaching. It is to this that we now turn.

Why do students study/not study environmental and social accounting?

The accounting education literature has, from time to time, addressed the issues of why students choose the options they do. It has also explored students’ reactions to courses of environmental and/or social accounting and investigated why environmental and social accounting remains such a relatively unpopular option for undergraduate students. Within the context of this report, it seemed to us to be essential to examine the views of students quite carefully. The reasons for doing so seemed fairly self explanatory. That is, students not only represent a crucial element on the ‘demand’ side of course provision but they also represent the ‘product’ of accounting education. In investigating student choice not only might we then learn why students make the choices they do but we might also learn something of how they perceive themselves in relation to the accounting profession itself.

We already know from prior research (as well as extensive personal experience and student course appraisals) that students who take environmental and social courses from choice, find the experience highly stimulating and enjoyable. Similarly we know that students who have to take such a course as a compulsory module are more divided in their reactions and many find the course irrelevant, too demanding and not enjoyable, (see the references above). However, no papers of which we are aware have tried to closely examine students’ expressed reasons for choosing/not choosing a social and environmental accounting option when it is available. That is the purpose of this section.
The research

The research drew significantly from prior research into students' thoughts about and reactions to ethical issues in accounting education. In that research, the role of the social and environmental accounting course had been pivotal. Such a course typically provided the only mechanism through which undergraduates could explore and develop any concerns they had about moral issues in accounting and finance. Furthermore the course had also provided a means by which they could seek to explore and articulate any basic concerns they had about the essential nature of accounting, finance and their studies of the subject (Gray et al, 1994; McPhail and Gray, 1996). The interviews with undergraduates, undertaken for that research, formed the starting point for this research. Further unstructured interviews were held with students. These experiences were used to derive a series of questionnaires which students were asked to complete. The questionnaires were revised and pilot tested in the normal way. (See, again, Collison et al (2000) for more detail.)

The questionnaires eventually comprised a series of statements about students’ reasons for choosing/not choosing undergraduate options and respondents were asked to indicate the importance or otherwise of each of these statements in their choice. (The questionnaires are reproduced in Appendix, Instrument C). The questionnaires came in two forms: one for students who had chosen a course in social and environmental accounting; and one for students who had chosen another option (ie had ‘rejected’ social and environmental accounting). Each form of the questionnaire comprised two sides of a single A4 sheet of paper, on one side were the reasons why the student did choose their option and on the other why the student did not choose another (eg a social and environmental) option. This permitted greater symmetry and even-handedness in the data collection. The questionnaires were administered in class by colleagues involved in the project at three universities. 216 usable questionnaires were received and analysed.
Analysis

The completed questionnaires were analysed in four stages which involved an analysis of average responses to questions, an exploration of relationships between answers and sophisticated multivariate analysis. The reasons for taking these increasingly complex steps in analysis were simply to develop an iterative approach to the data that would allow the most convincing conclusions to be teased out. This cautious and iterative approach proved to be worthwhile.

Tables 5.1 and 5.2 are reproduced here to give a flavour of the results and also to illustrate how this iterative approach to the data worked. The tables show the results from the first (of the four) stages in the data analysis.
Table 5.1  Principal reasons given for choice of option

<table>
<thead>
<tr>
<th>Reasons given</th>
<th>Choosing non-SEA option</th>
<th>Choosing SEA option</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Rank (n)</td>
</tr>
<tr>
<td>Relates to an area I want to know about**</td>
<td>3.83</td>
<td>1 (94)</td>
</tr>
<tr>
<td>Will expand my education</td>
<td>3.73</td>
<td>2 (89)</td>
</tr>
<tr>
<td>Is potentially important to me**</td>
<td>3.72</td>
<td>3 (93)</td>
</tr>
<tr>
<td>Should be interesting</td>
<td>3.71</td>
<td>4 (91)</td>
</tr>
<tr>
<td>Will help my career**</td>
<td>3.64</td>
<td>5 (92)</td>
</tr>
<tr>
<td>Addresses ethical issues**</td>
<td>2.49</td>
<td>24 (59)</td>
</tr>
<tr>
<td>Will make me think</td>
<td>3.45</td>
<td>9 (86)</td>
</tr>
</tbody>
</table>

Table 5.2  Principal reasons given for not choosing other option

<table>
<thead>
<tr>
<th>Reasons given</th>
<th>Rejecting SEA option</th>
<th>Rejecting non-SEA option</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Rank (n)</td>
</tr>
<tr>
<td>Doesn’t relate to an area I want to know about</td>
<td>3.39</td>
<td>1 (88)</td>
</tr>
<tr>
<td>Will require more work**</td>
<td>3.37</td>
<td>2 (87)</td>
</tr>
<tr>
<td>Is more qualitative than quantitative (or vice versa)**</td>
<td>3.31</td>
<td>3 (80)</td>
</tr>
<tr>
<td>Will be more difficult than other options*</td>
<td>3.26</td>
<td>4 (89)</td>
</tr>
<tr>
<td>Will not be enjoyable</td>
<td>3.25</td>
<td>5 (86)</td>
</tr>
<tr>
<td>Is unlikely to be interesting</td>
<td>3.18</td>
<td>8 (82)</td>
</tr>
<tr>
<td>Is given by a lecturer I do not like</td>
<td>2.35</td>
<td>25 (40)</td>
</tr>
<tr>
<td>Is not potentially important to me</td>
<td>3.24</td>
<td>6 (87)</td>
</tr>
</tbody>
</table>

The tables are adapted from Collison et al (2000). The stars refer to levels of statistical significance: ** = differences between the means of those choosing versus those not choosing an SEA (social and environmental accounting) option is statistically significant at 1% (two-tailed test) (* = 5%).
Although there was much that was persuasive in the tables and the results went someway towards corroborating the reasons posited in the prior literature, it was also apparent that these tables did not tell the whole story. As it transpired, the full story looks a great deal more subtle and exciting than these tables suggested.

**Tentative results**

The subsequent stages of the analysis led to a recognition that the data should be treated with some caution and the ‘results’ in Collison et al (2000) are, consequently, expressed as hypotheses. The essence of these hypotheses is that SEA (social and environmental accounting) students are more similar to non-SEA students than they are different from them. Some of the more widely suggested reasons for differences in choice – most notably about the amount of work and preferences for qualitative or quantitative work – are present in the analysis but their influence is difficult to pin down. We hypothesise that these factors are perhaps less crucial than previously thought. More stimulating though, was the strong hypothesis that both groups of students tend to make their course choices for the same reasons. These reasons include such things as personal importance and enjoyment, a desire to know about the area and the challenge of the subject matter. These were crucial for both sets of students. However, what did seem to distinguish the groups of SEA and non-SEA students was that whilst SEA students appeared to relate issues like enjoyment and challenge to their personal life, the non-SEA students related them to their career.

This suggestion, if replicable, is both novel and important. That is, there would seem to be two distinct groups of accounting undergraduates: a large group to whom interest and the sense of self is constructed around how they see themselves in their future careers (a matter returned to in chapter seven) and a much smaller group whose interests are constructed around a more personal sense of self. Whether one chooses to see the larger group as practical and realistic or as indoctrinated whilst the smaller group are seen as self indulgent
or aspiring to transcendence is a matter of opinion. But – and it is a major but – these distinctions link closely with our earlier discussions about the nature of education. It looks highly plausible that the larger, career-orientated group will resist any attempts to provide them with a broader, more ‘critical’ education because it does not fit with either the way in which they perceive themselves or their perceptions of their future self. We would hypothesise that accounting students in the main are constructing themselves – and are being encouraged in that construction – as applied vocationally-orientated people. The consequence of this is that anything not perceived as directly career related is not just irrelevant but actually outside their conception.

We might be stretching a point here but it does fit exceptionally well with an increasingly important theme in the accounting research literature. If it is true, then the primary resistance to new, critical and reflective issues – including environmental issues – is not institutional or structural but psychological. Students do not want to consider – nor can they bring themselves to relate to – such issues except to the extent that they were perceived as being genuine aspects of current professional practice.

If this is true for students, it seems highly likely that it is even more true for teachers who have spent longer in the system and have become inculcated in the accounting way of doing and thinking. It seems equally plausible that such a mental attitude will communicate itself to students and reinforce an already strong tendency in this direction.

Furthermore, if this is a plausible inference (and it also fits closely with much of the research literature) then two further – and disturbing – inferences can be drawn. First, we might infer that no new material will find its way into the accounting curriculum until it can be clearly seen as directly career-relevant. Second, where new material does find its way into the syllabus, we cannot expect it to be taught (by teachers) or studied (by students) in ways which will develop the reflective and critical aspects of the discipline. So, as we saw above, environmental issues can be directly applied in financial accounting – most obviously in the areas of contingent liabilities and provisions – and in management
accounting as a response to the growing needs of environmental management. Sustainability cannot find its way in – because it is a large, complex and imprecise concept with little or no direct career implications within the way in which careers are currently seen and represented. If it were to be taught at all it would end up as a five-mark sub-question listing four essential points of sustainability. This, obviously, misses the point entirely.

This line of reasoning is, to our mind, quite disturbing. It was also unexpected at the outset of the research for this project. As these ideas began to emerge they significantly influenced our approach to empirical enquiry into the attitudes and views of senior academics and heads of departments. It is to these that we now turn. We will return to re-examine these potentially disturbing inferences as the report progresses.

Talking with senior accounting academics

The university-based part of the research for this project involved unstructured interviews with non-accounting academics (see chapter three), a questionnaire survey of accounting teachers and, as we have just seen, interviews with and questionnaires to undergraduate accounting students. As part of future work, it would certainly be valuable to develop a more detailed interview programme and develop further the insights which are reported in Humphrey et al (1996). This proved to be beyond our scope and so we held selected conversations and semi-structured interviews specifically with a number of senior academics and heads of departments. There were two main reasons for selecting this group in particular. The initial reason had been that it was assumed that senior academics and heads of department in particular would exercise a not insignificant power and influence over what was taught in departments. As the project progressed this reason diminished in importance but it also became apparent that the experience of these individuals – as well as their capacity to indulge in a fairly robust discussion of the issues - would be valuable.
Initial interviews with eight senior academics dealt broadly with environmental issues within the current teaching of accounting in the departments. They were not especially productive discussions and rapidly began to echo the sorts of issues we have discussed in the earlier chapters on this report. The following quotes from four different academics seem to capture the essence of the situation:

Why not more environmental accounting teaching? Inertia ... it never crossed my mind!

... why environmental issues? There are so many other matters that need to be dealt with ... and, to be honest, I know more about those. I am more interested in x and y than in environmental accounting ...

There isn’t really the space or the time. The syllabus is choc-a-bloc as it is ... something else would have to go.

Yes ... I think so ... I am fairly sure that X has been developing an interest in those sorts of things and does something in her third year management accounting course. And of course it crops up in the theory bits in the final year.

In retrospect, it would have been valuable to have made a specific enquiry into whether or not senior academics do deliberately prevent (or at least strongly discourage) new courses and/or new material in extant courses. This we did not do. From a number of the earlier conversations we certainly gained no sense that an individual with a serious interest in a field like environmental accounting and who could put together a sensible course proposal would be blocked as a deliberate policy. This seems to echo what emerged earlier from the questionnaire to teachers – there are no deliberate blocks on teaching innovation. What there is, however, is a series of major structural impediments that make any innovation more difficult. The whole gamut of, inter alia, course approval, quality assurance and consultation processes when coupled with (perceptions of) accreditation constraints and the growing pressures
on all aspects of academic life mean that one must come to expect inertia to be the normal state.

If this was a correct interpretation of the situation, then the role of senior academics and heads of departments as gate keepers and/or innovators with respect to environmental (and social) accounting teaching was either not a crucial one – or if a crucial one would require a very much more subtle form of enquiry to isolate and identify it. What seemed much more significant was the sense we gained from all the senior academics that we talked with concerning the general state of university education and the increasing constraints under which we all operate. The conversations, after a brief flirtation with environmental matters were generally tending to become re-runs of those undertaken for (and reported in) Parker et al, (1998). We then switched our attention to focus on the broader idea of innovation in accounting degrees and environmental issues as one of those possible areas. This was much more productive and, incidentally, made it relatively easy to explore the extent to which individuals had given the more radical environmental issues much personal attention and thought.

Environment as an issue of innovation

The first point which comes through – and is no surprise at all – is that senior academics with a confirmed interest in social and environmental accounting will typically introduce such teaching into their undergraduate programme somewhere. Those without such interest will not and, except in the most hard-pressed or the most output-orientated departments will, rather, have sought innovations within the degree that represent their own developed interests – in critical accounting, accounting theory, not-for-profit, feminism, international accounting or whatever.

The second thing which came through strongly was the abandonment of all but the most marginal innovation. Even amongst those who were known to be dedicated and innovative teachers, the Teaching Quality Assurance (TQA), accessible and nicely laid-out textbooks, pre-prepared
overheads and tutorial exercises, and students’ feedback all dominated over other more educationally desirable objectives.

... pressure on resources is reducing the availability of options. Semesters, modules, teaching pressure, photocopying restrictions are forcing us towards textbooks and less innovative teaching ... the pressures are all towards short termism and this doesn't allow for change.

...[the] current academic environment is closing down innovation, teaching, scholarship and thinking and driving out the important issues ...

This is a gloomy picture (and see also Parker et al, 1998). It is certainly not the sort of environment within which to be optimistic about innovation. Indeed, the conversations suggest a further inference from the questionnaire data from teachers reported earlier. That is, in such a climate, only the most dedicated can muster the energy for innovation on areas about which they are knowledgeable and about which they are enthusiastic. If individuals are less than dedicated, enthusiastic and knowledgeable on environmental issues then we have another sufficient, if not necessary, explanation for the apparent lack of any major growth in environmental accounting teaching.

The conversations led to the exploration of a number of further aspects. Four of the conversations all used the same expression that ... environmental issues are used as exemplars ... of the effects of and demands upon accounting. Environmental issues served a useful purpose as they were widely recognised and high up the political agenda. Notably, however, other issues – employment, innovation, international development or equal opportunities - would have served as well had they been as popular. But environmental issues were not developed, either because:

... there are lot of pressing issues which accounting is not addressing. We should be trying to provide as wide and as balanced a picture as possible. Environment is only one of those ...

or because:
... I draw from what I know about – my own research really. I can only speak about the environment as a concerned citizen without undertaking extra effort.

In addition, most conversations touched upon the students. Interestingly, it was not just the students’ expectations and teaching appraisals that were the worry (although these were significant) but a rather more compassionate concern about just how much one could expect from students. One conversation expressed this delightfully:

*Some of the technical issues in accounting are so complex that understanding them is difficult enough without trying to find space for “social audit”... there is no place in a head for “social audit” when one is trying to wrestle with consolidations.*

Finally, each conversation was brought around to a consideration of sustainability. Such consideration was very brief in nearly all cases where the academic was not an “environmental and social expert”. It would appear not to be a widely understood concept. Where it is understood, it is difficult to bring into teaching because:

*... it is an imagination issue. Modularisation, for example, makes it very difficult to get students to read and think ...*

One comment also really stood out – and this may be an important indicator of a wide and fundamental problem:

*... sustainability? ... I am aware of the issues broadly ... but it is scary ...*

There was much to think about from these conversations and if we had experienced any doubts about widening this project to include the broader issues of university education in general, these conversations dispelled them.
Conclusions

This chapter has reported on three separate empirical enquiries undertaken for this project. The survey of teachers, the survey of students and their reasons for choice and the conversations with senior academics, when taken together, begin to provide a complex – and far from encouraging – picture of accounting education in UK universities.

Accounting education in universities has been a source of widespread and substantial concern for quite some time now. As we discussed in chapter four, the universities appear to be caught between the tensions of vocational and ‘transcendent’ education as Paisey and Paisey (2000) have so graphically illustrated. That situation shows every sign of worsening as the pressures on academics continue to escalate. And the principal casualty of this worsening situation would appear to be innovation and an educational system which embraces and explores new and emerging issues. University accounting education looks to be becoming even less forward looking than it has been in the past.

One of the key conclusions to emerge from this chapter, whilst no particular surprise, is nevertheless concerning: the bulk of accounting undergraduates, it would appear, see their university education as exclusively vocational. The problem is that the notion of what is ‘vocational’ seems to be very narrowly conceived of in the students’ minds. An undergraduate student cannot, in the majority of cases, have any very sophisticated understanding of where their future career will take them and what skills, knowledge and attributes they need to possess to become (as the AECC emphasises) good accountants. We will return to this issue in chapter seven but it seems that a student’s perception of what is vocational can only be derived from the public displays of the profession plus what is communicated by university teachers. The resultant overly simple and short-term conception that students appear to gain and hold onto is not only dangerously naive but does not bode well for the future of the profession. And, as we saw in chapter four and shall again see in chapter six, the profession itself is not happy with the undergraduates it is recruiting.

Of more general concern, there is a widespread anxiety in the litera-
ture, which our enquiries in this chapter have done nothing to dispel, that accounting teachers are unable and/or unwilling to formally and robustly challenge the naive and functional conception that students appear to hold – and wish to continue holding. Accounting teachers, if anything, would seem to be content to reinforce that conception. If the literature – especially from the US – is to be believed, the primary difficulty here is that the professional examinations are the most influential communicator of what it is to be an accountant. Students and teachers would appear to be overly influenced by the professional syllabi and, more worryingly, exceptionally reluctant to step outside the notion of ‘accounting’ as represented by those syllabi. As long as there remains no clear and authoritative agreement on the respective roles of university education and professional examination training, the present situation looks likely to carry on in its present form.

Such innovation, (of subject matter and inculcation of critical thinking rather than innovation in teaching methods) as does occur appears to be driven almost entirely by the particular interests of the teachers. But even that interest would appear to be constrained, to a degree at least, by concerns over student reaction. In this context, environmental issues are seen as only one area of such innovation and, apart from their prominence on political agendas, are not necessarily seen as any more or less important than any other of the plethora of ‘new’ issues with which the accounting research literature is concerned.

As the work for, especially, this chapter progressed it seemed increasingly likely to us that the problem we were seeking to illuminate was even more complex than we had at first imagined. That is, not only was there the problem of what we meant by ‘environmental issues’ (the environmental management versus sustainability problem) but we also had three additional problems: why should environmental issues be prioritised over many other factors?; how does one go about encouraging innovation and responsiveness in undergraduate accounting education?; and, even if one is able to introduce environmental issues to the accounting syllabi, can one (should one?) ensure that it will be taught in a way which emphasises longer term and critical thought as opposed
to short term, career-orientated functional thought? These are puzzles to be revisited in the final chapter of this report.

The inferences discussed above and which were drawn from the student-based enquiries and the conversations with academics are not confounded by the survey of teachers and teaching reported here. Despite some minor differences, not a lot of change has apparently occurred in the teaching of environmental (and social) accounting in the last six years. Optimism about student demand has actually declined and the potential impediments to teaching environmental accounting have, if anything, reduced even further. Whilst it would probably be incorrect to leap to the conclusion that there is a significant number of universities where an accounting graduate would receive no instruction that touched upon environmental issues, it does seem possible to conclude that there are relatively few accounting undergraduates receiving any substantial inculcation in the wider and pressing matters that the current environmental and social agendas raise for all of us – not least accountants. Nothing that we touched upon here or in the previous chapters suggest that this is likely to change without a significant push from the outside. It is certainly the case that The Toyne Report has had no discernible influence on university accounting education – and that, alone, is sufficient cause for concern.
Endnotes:

2. More detail of the replication of this survey is reported in Stevenson (2000). The full detail can be found in Lorna Stevenson’s MAcc thesis at the University of Dundee.
3. The argument behind this decision was that the 1990s had seen a very significant rise in awareness of and interest in environmental (and latterly, social) issues. Whilst much of the interest may not have revealed itself by 1992 when Owen et al undertook their work, it seemed plausible that, if accounting academe was responding to the profession’s changing environmental agenda, this would be apparent by 1998.
4. The part courses identified by Owen et al offered, on average, somewhere in the region of the equivalent of 30% of a full course. Our survey suggested that this was now nearer 23%.
5. There are differences in both the sample and the response rate between the Owen et al and the present surveys. It proved to be impossible to make any precise assessment of the differences in the samples and, thus, formal comparison between the surveys is held at a very general level.
6. A word of caution is relevant here. Both surveys report their results separately for full and for part courses. Both surveys find differences in the aims – and, indeed, in each of the other areas of enquiry – of the two sorts of course. These differences are not reported here in any formal way for reasons of brevity and because it is the overall picture that we are seeking to create. For a detailed comparison see Stevenson (2000).
7. This issue of students’ perceptions is dealt with in more detail below.
8. The recent upsurge in interest in social accounting has been dominated in practice, in management consultancy and in the popular and professional press by the re-emergence of the term social audit.
9. For more detail, see, for example, Blundell and Booth (1988); Lewis et al (1992); Mathews (1994; 1995a); Gordon (1998).
10. This section is drawn directly from Collison et al (2000) from where greater detail on the method, approach and statistical testing can be found. For reasons of brevity this section provides only the bare bones of that paper and does not provide the detailed reasoning and evidence on which the conclusions were based.
11. More formally the stages involved: identification by mean response of the initial dominant reasons for choice/non-choice; a heuristic assessment of cross tabulations; a cluster analysis producing dendograms; and a principal components analysis.
The reasons for the caution are twofold. First, and most significantly, there were more differences between the course structures at the different universities than even our pilot testing had suggested. In addition, our attempt to maintain a hold-out sample also failed on the issue of not recognising the range and form of choice. These matters are dealt with in Collison et al with great care but it would be disingenuous to claim too great a reliability for the results. Second, as the analysis proceeded, the subtlety of the likely explanation emerged slowly. Such an explanation might be more successfully tested in a more direct form and with a tighter research design.

These correspond to the well-established distinction between, respectively, extrinsic and intrinsic motivation.

See, for example, French et al (1992); Gray et al (1994); McPhail and Gray (1996); Houghton and Hronsky, (1993)

See, for example, Brown and Goulding (1993); Davis and Sherman (1996); Francalanza (1997); McKernan and Dowell (1998).

This echoes the findings from the US study of MBA students reported in chapter four.

Typically meaning here the RAE (UK’s Research Assessment Exercise) and, to a lesser extent the TQA process.
CHAPTER SIX

ENVIRONMENTAL ISSUES, THE PROFESSION AND PRACTITIONERS

If by education we mean the cramming of a pupil’s mind with facts and rules, without any real conception of their meaning or of the relations in which they stand to each other, it is waste of time. This kind of education fits a man for a certain groove, in which he moves in a routine way, a mere piece of mechanical machinery, incapable of independent thought or action. If confronted with a new condition, to which his rules do not apply, he is helpless, and is liable to make mistakes that are disastrous, because his action is based on insufficient knowledge of the foundation principles ... (Walton, 1917; speaking on the purpose of college education for accountants and quoted in Nelson, 1995)

This chapter moves the focus from the universities to practitioners and the professional accountancy bodies. In the same way in which chapter four sought to review the accounting education issues in the universities and thereby provide a basis for the empirical work rehearsed in chapter five, this chapter seeks to provide a brief overview of some of the key issues concerning the profession, its examinations and syllabi, its recruitment and its training. This will then provide a basis from which to review the second tranche of empirical work undertaken for this project.

As is now apparent, the problem we set out to address in this project is complex. The apparently simple question What do accountants need to know about the environment? has become increasingly complicated as subsequent layers of the onion have been peeled. “Environmental
issues” peel back to reveal demanding questions of sustainability and social justice which, in turn, bring with them major questions about economic and financial organisation. “Educational issues” peel back to reveal problems of vocational versus “transcendent” educational experiences and objectives which, in turn, reveal complex psychological and institutional issues facing academic accountants. “Professional issues” (as we shall see in this chapter) peel back to reveal tensions about the nature of the public interest, the nature of accounting training and recruitment. One of the things which makes all this so complex is that there is no firm place to stand. That is, as far as we can assess, there is no explicit agreement amongst the community of (even UK) accountants on such fundamental issues as, inter alia, public interest, the role of education in developing independent critical thinking and the exigencies of sustainability. For us to have made a decision on these issues would have made life a great deal easier for us but would have led us to ignore much of the development and practice currently taking place in accounting and, more especially, run the serious risk of alienating all but a small minority of accountants. For fairly obvious reasons we are reluctant to take either of these risks too early in this report (but see chapter eight).

Ultimately, it is the professional accountancy bodies which ‘make’ accountants and therefore it is inevitable that it is the views and actions of the bodies which have the greatest influence on what is and what is not considered to be ‘accounting’.

... the accounting profession has a determining influence on accounting education. It holds the key to membership and consequently can dictate the educational and practical experience standards to be achieved for entry to the profession. As regards the educational aspect the profession dominates the topics to be covered and the examinations to be passed for membership ...

(Francalanza, 1997, p119)

In the process, the bodies also have a significant, if indirect, effect on what the universities teach and how prospective accountants – in the form of students – perceive what is taught. But there are also ten-
sions here. As we well know, the accountancy bodies, even in the UK, are far from homogeneous, those bodies experience significant conflicts between their roles as professional body, regulator and trade association and, there are tensions between what the diversity of employers want from their accountants and what the professional bodies believe it is right to deliver. Once again, we have a potent brew into which to stir questions about the natural environment.

In this chapter we have, therefore, tried to keep in harmony with previous chapters and present as broad a picture of the issues (as we see them) as possible. In the next section we briefly rehearse the structure of the accountancy profession. Then follows a brief look at the academic-practitioner-profession relationships. From this background we move to look more closely at the nature of the accounting profession, its examinations and syllabi and the characteristics that recruiters to the profession are looking for. The penultimate section reviews recent developments in the profession concerning environmental issues.

**Structure of the accountancy profession**

One would be hard pressed to provide a short and tight definition of accountant that embraced accountants throughout the worldwide accountancy profession. In the very simplest of (tautological) terms all accountants are members of professional accountancy bodies who have passed professionally-approved examinations in accountancy and who share, to a greater or lesser extent, a knowledge base and, more subtly, the same “cognitive structure” that Houghton and Hronsky (1993) talk about. It is when one looks at the routes into the profession and/or the range of activities undertaken (or clients/employers served depending on your point of view) that the diversity is made more manifest.

It is the diversity of entry routes that concerns us here. Were there a single route of entry it would be so much easier to talk about the “education and training” of accountants. It is not just that an accountant might have had two, three, four or even five years relevant practical experience as part of his/her training and have taken one, two or three
diets of examinations set by the appropriate professional body. Of particular relevance is that an accountant’s pre-experience education could have been as diverse as it is possible to imagine and the relationship between that experience and the professional examinations could have been either fully integrated, non existent, or anywhere in between. It is clearly beyond our scope to rehearse the international diversity of accounting education here – not least because the diversity in the UK alone is more than sufficient to keep us fully occupied.

A UK accountant, before entering professional training might have experienced: no post-school education; a one-year full-time or part-time ‘foundation’ course; or may have had two, three, four or even more years of full-time university education which may have contained no accounting or business/management studies or may have been entirely dedicated to accounting. The point being that, with the limited exception of ICAS accountants, it is impossible to make a generalised statement about the shared pre-training educational experience of any members of any of the UK accountancy bodies. Just to reinforce the point, whilst something in the region of 80% of ICAS students have a fully relevant accounting degree, only about 20% of ICAEW students have such degrees. The point is that if the UK accountancy profession believe – for whatever reason - that all accountants should possess particular knowledge or skills, then those requirements must be enshrined in the professional examination syllabus as this is the only common educational experience of accountants. And, as we shall see later, it is simply not possible to cram ever more into that syllabus. There is already far too much material in the existing syllabi. In addition, some sorts of material are simply not appropriate to the intense “crammer-style” training which students, by and large, receive for their professional examinations. So, as we shall see, there is not any room for environmental issues and, even if there was room, it could only be taught in an intensely functional manner which entirely misses the issues in question.

Along with the question What do accountants need to know? comes the altogether more difficult question What do they already know? and
the answer to that is *nobody can say*. Every country has problems to varying degrees with graduate/non-graduate entry but, as far as we can ascertain, no country other than Britain has such a cavalier disregard for the relevant accountancy degree and recruits so many putative accountants who know next to nothing about their profession. It is this, more than anything, which makes the project we have been set, and which we are attempting to clarify, so very difficult. If the UK was, like ICAS, predominantly accounting graduate entry, the issues would be much simpler. They would not be solved of course – as we have seen, there are more than enough difficulties in the accounting degrees – but the range of solutions which presented themselves would be greater and more practical.

It is with reluctance, therefore, that we need to spend a little time reviewing the academic-professional relations – especially in the UK – as this would seem to be a major component of any ‘problem’ we perceive with accounting education and, consequently, an important component of any solution.

The next two sections attempt to do this by first providing a brief overview of the academic-practitioner relationship and then looking more closely at accreditation of accounting degrees.

**Academic-practitioner relationship**

It is probably not necessary – it might even be counter-productive – to provide a detailed rehearsal of academic-practitioner interactions. However, it would, in our view, be short sighted to ignore the issue. That there is an ‘expectations gap’ between academics and practitioners in accounting is both (probably) incontestable and, probably, inevitable. The two groups inhabit increasingly different worlds with, perhaps most significantly, differing performance indicators and very different time horizons. In itself, this should not be sufficient to produce major conflicts – after all, the majority of academics were themselves practitioners at some stage or other. In addition, there are far too many illustrations of where academics and practitioners work together for it to be either
sensible or accurate to see the gap as generic and/or chasm-like, (see, for example, Gray, 1996). Yet, nevertheless, from time to time concerns over ‘chasms’ do emerge – and not just over the ‘preparation’ of students for employment (see later). Concerns arise over what is taught, what is researched, the insensitivity of the academic to the needs of the practitioner and, vice versa, the inability of the practitioner to appreciate the work of the academic.4

It is probably not so much the existence of a ‘gap’ that need concern us so much as the nature of that gap. Personal experience speaks clearly that any gap is a great deal smaller, less worrying and less likely to generate conflict in Scotland than it is in (say) England and Wales. That the majority of practitioners in Scotland have a relevant degree and the majority of academics are professionally qualified means that both parties have some understanding of each other. More particularly, practitioners will have had some exposure to both accounting theory and accounting research. This is not the case in England and Wales. Consequently, it is probably no coincidence that one of the more cogent and worrying analyses of the gap occurred in England. Power (1989) and Napier and Power (1992) take the profession to task for castigating the universities and for treating ‘academic’ as synonymous with ‘irrelevant’. Whilst it may well be that the immediate and direct relevance of much research (and perhaps, teaching) is sometimes difficult to identify, it is generally the nature of any profession that it needs longer term research horizons and, more appositely, careful theoretical development. It is a long-standing theme in accounting and not restricted to the UK:

... theoretical pronouncements not immediately translatable into practice tend to be scorned by the rank and file of practising accountants as ‘irrelevant’ [Bedford, 1969, p29]

The point, as we see it, is that whilst academe can stand guilty of many failings, to castigate it for its theory and longer-term perspective tells us a great deal more about practitioners’ perspectives than it does about academe, (see also, Zeff, 1996; Lee, 1995). Academe, no matter how
it reformed itself, would still attract the ‘scorn’ of many practitioners as long as it concerned itself with theory and longer-term and/or not immediately accounting issues. (The resistance to social and environmental accounting until fairly recently is an excellent illustration of this.)

There is a problem here with the generality of practitioners themselves – especially outside Scotland. If a significant proportion of senior and influential members of a profession cannot see the essential need for theoretical development, new ideas, innovation and a longer-term perspective then Zeff’s (1987) anxious question \textit{Does the CPA belong to a profession?} is more important than we might like to believe.

For us, the need to re-open this (painful and, so far, unproductive) area is founded on a belief that the education and training of accountants – as well as the long run health of the profession – depends absolutely on the marrying of academic and practitioner perspectives. \textit{Not} the academic seeing the practitioner perspective - but each seeing the perspective of the other. Only then might a sensible debate about accounting, the profession and, consequently, accounting education and training have any merit or substance. It is our perspective that there are areas of the UK accounting profession where such a debate cannot currently take place. It is difficult to feel positive about that.

Whether the chicken of the ‘gap’ between academic and practitioner perceptions or the egg of disdain for academe comes first, is probably not the issue. But these matters do need resolving – if only so that the whole troubled matter of accreditation of accounting degrees can be clarified.

\textbf{Accreditation of accounting degrees}

The accreditation of accounting degrees can take a number of forms. At one extreme, successful completion of an accredited degree can be a pre-requisite for the student’s entry to either the profession or to the professional examinations of the profession. In some cases the student might then only need to acquire the appropriate years of practical relevant
The Provision of Education and Training

experience to become a full member of the profession. In other cases, students may be required to sit one or more diets of examinations, typically to test both professional technical knowledge and overall professional competence. The more typical form of accreditation in the UK is that an accredited degree simply gives exemption from some portion of the examinations required by the professional body for qualification. Such exemption may embrace only the entry level examinations or may be extended to further levels or to particular papers within those levels.

The state of accreditation in the UK is in a constant state of flux (a matter we return to later) and it would thus be neither practicable nor apposite to attempt to provide here a detailed review of current and recent accreditation policies. (Of some significance, it is striking how very little systematic research has been undertaken into the impact of accreditation of accounting degrees and the explanations for different university responses to it.) The essential point here is, however, that three or four years of intensive study of accounting, finance and cognate subjects might furnish the accounting graduate with as little as the equivalent of one year’s study and examinations. This raises an interesting conundrum. If only a third or a quarter of an accounting degree is considered to be relevant, then, presumably, the rest is considered to be ‘irrelevant’. Given that the majority of UK accountants do not have accounting degrees at all, it would certainly seem to be the case that the profession does, indeed, consider such material ‘irrelevant’. If a substantial proportion of an accounting degree is ‘irrelevant’, two questions emerge immediately: why do students with a strong vocational orientation still choose to take such degrees?; and why, as would appear to be the case, do university departments place so much emphasis on the teaching they deliver being professionally orientated?

The issue is, surely, that if an accounting degree is not going to be a pre-requisite for entry to the profession then either that degree is ‘relevant’ and should attract substantial exemptions or the universities should be taking the opportunity to embrace wider, less vocational,
transcendent educational objectives.\(^5\) As we saw in chapters four and five, neither situation would appear to obtain.

Putting aside the problems that university accounting departments face, the recognition and accreditation of accounting degrees looks like a potential source of solution to the perennial re-evaluation of accountants’ education and training of which the UK profession seems so fond (see later). Yet it seems that, in the current climate, the profession cannot bring itself to address what an accounting education – as opposed to an accounting training - might actually mean. To do so, would lead (inevitably in our view) to re-examination of an accounting graduate-only entry and/or more significant requirement for a wider accounting education and greater levels of exemption from professional examinations. Despite flurries in this direction:

> We can raise the status of the relevant degree and increase our contacts with universities [John Mordy, KPMG Partner, Accountancy October 1986, p20]

> This autumn all the UK institutes are almost certain to recommend that graduates with degrees in accountancy should get exemption from the first half of the professional exams [Accountancy Age 17 September 1987, p15]\(^6\)

The UK profession, most especially outside Scotland, seems unable to seriously integrate universities into the professional training process. Although it is rarely stated, it looks to us as though the UK profession as a whole is quite incapable of acknowledging - as do ICAS - that there might be some genuine value in studying accounting at university. As long as this situation obtains, it seems highly likely that the academic-practitioner divide will continue to grow and that accreditation will continue to be a cumbersome and tense process which, in strictly rational terms, is barely worth the trouble to either students or the profession.
Professional examinations and syllabi

Perhaps the problems that arise at the university-practitioner interface would not be so great if the profession appeared to be satisfied with its own training. In such a case, practitioners could, conceivably, simply ignore accounting teaching in the universities (something which, it sometimes seems, many practitioners would like to do). But this is so clearly *not* the case.

One of the unexpected results of the work undertaken for this project arose from a review (an initially brief review) of professional examination syllabi and their development. One startling result was the regularity with which the professional bodies undergo extensive, expensive and fundamental appraisals of their professional syllabi and examinations. That there needs to be a constant updating of syllabi is not the issue in question – that seems relatively uncontroversial. What is rather more striking – and of concern – is that these re-examinations would appear to be driven by three (related) factors: what is it to be an accountant?; how might the qualification from this institute obtain market advantage over that from other accountancy institutes?; how are we to deal with the increasing volume of material that we believe must be part of the training syllabi?

Idealistic though it might be, rational solutions to education and training problems are unlikely to present themselves when there remains substantial doubt over what it is that the process is intended to produce. In part, doubts over what an accountant should look like are exacerbated by the tensions within the professional bodies over their roles as regulators, protectors of the public interest, trade associations and service institutions supplying clients. This situation is made worse by the UK’s diversity of bodies which, inevitably it seems, results in institutional rivalry diverting attention from the essential attentions which are faced by the profession as a whole.

Such confusion must, it seems to us, exacerbate the problems of defining what constitutes basic accounting knowledge and, as a consequence, how the profession can avoid cramming ever more into
already overloaded syllabi, (see, for example, Paisey and Paisey, 2000; Dawe, 1997). As we have already seen (Chapter 4), this is a worldwide phenomenon and has led to: explorations of how putative accountants might be trained to learn how to become accountants; the definition of core skills and attributes; increasing specialisation; post-qualification training; and life-long learning. Such developments seem inevitable and, in principle at least, do not seem undesirable. They do, however, raise again the difficulties of such a process when it is unclear what an accountant is, when there is little or no common agreement on what the base-line knowledge and educational experience of a putative accountant is assumed to be and what putative conceptual underpinnings - if any - such an accountant needs. Without clear answers on these questions it is not at all obvious that questions about environmental (and social) issues can be addressed sensibly. And, it would seem, we cannot address such questions in the first place without clarity on the primary function of accountants and the accounting profession.

Accounting and the public interest

... auditors approving financial statements that bore no resemblance to the reality of life ... [T]he public felt accountants were highly trained so as to know better ... You rejoice in a licensed monopoly. You are not in a business, you are in a profession. Unhappily, some of you have stopped thinking in those terms. [Supreme Court of Justice Willard Estey quoted in CA Magazine Editorial, 3 July 1991]

We do not have to look far to find increasing levels of disquiet about the changing face of the profession and, in particular, its increasingly disputed claims to being a profession which serves the public interest. In a particularly penetrating analysis, Puxty et al (1997) show how the profession’s claims to serve the public interest are never fully explored by the profession and are, generally, speaking, only brought into play when the profession is facing some threat (over, for example, regulation) from outside the profession. This contrasts starkly, they argue, with the notable absence of references to the public interest when the profession
The Provision of Education and Training

is talking to itself. In these cases the profession uses arguments based on its role as a trade association, as an organisation for the protection of its members or as a corporate body to regulate services to clients. (See, for example, the Editorial in Accountancy Age, 9 October 1997, p6 for a striking illustration of this).

That the accounting profession should serve the public interest is a tautology (Brilloff, 1986). The ICAS Royal Charter of 1854 and the Supplementary Charter of 1951 both make strong and repeated appeals to the Society’s desire and necessity to serve the public interest. The ICAEW’s Royal Charter of 1880 argues that its formation would be “for the public benefit” and twice appeals to the “public interest” in its Supplemental Charter of 1948. But, unfortunately, we never learn what this public interest is and how accountancy successfully serves it. Neither do we learn in any subsequent publications – most notably those on the changing profession and its developing education and training policies – how these changes might be thought to increase the ability of accountants to serve this elusive but fundamental concept.

If we are not to learn of what responsibility to the public interest comprises and how it is that we successfully discharge this duty, how then might we learn how alterations to, particularly, the education and training of accountants succeed in enhancing or reducing that achievement? Simply accepting stated assertions on a taken-for-granted basis does not make it so.

More appositely, if accounting is not intended to serve the public interest what is it for? This is quite crucial when issues like environmental accounting are considered. Public interest cases for why environmental issues should be central to accounting are easy to make (see, for example, Gray, 1990; Gray et al, 1993). But if the accounting profession is simply a trade association concerned with protecting its members and clients then a new and difficult area – such as environmental accounting – can be largely ignored. The only reason for incorporating it into the accounting syllabus would be because of legal liability, new business or client exposure reasons. There would be no intrinsic reason for its
And that is the nub of the whole issue. Is there any intrinsic reason for doing anything in accounting? Without a substantial ethical and theoretical basis from which to argue, deduce and justify innovations then the answer must, almost certainly, be a resounding ‘no’. Justifications in the absence of such a basis must, by definition, be \textit{ad hoc} and appeal to pragmatic, ‘practical’ and, essentially, inconsistent reasoning. The foregoing material in this report has been unable to identify any such agreed basis – if, indeed, such a basis exists. Arguably, this is a situation which is maintained by the apparent widespread distrust amongst accountants – especially, although by no means only, practitioners – of theory and other ‘irrelevant’ ideas.

**Environmental issues in the profession**

Chapter two touched upon the range of ways in which environmental issues are affecting the day-to-day work of accounting practice. The inexorable growth in the environmental agenda is placing new demands on financial statements, auditors, management accounting, taxation, mergers and acquisitions, investing decisions and so on. In general, however, the response of practice has been piecemeal and somewhat below that which clients need from their accountants. Accountants, in the generality, have been slow – even perhaps reluctant – to undertake the necessary initiatives in the area.\(^\text{12}\) Even when we ignore the broader, longer-term issues arising from the exigencies of sustainability, there remains a clear need for a lead from the accountancy profession on what is required of accountants.

The professional bodies have not been inactive. A lead in linking environmental issues and accounting has been provided by the professional accountancy bodies (most especially ACCA and CICA) and the United Nations (see, for example, United Nations 1992) - in both cases, frequently working with academics.\(^\text{13}\) Interest and involvement have spread rapidly with, \textit{inter alia}, the Canadian, US, Australian, Japanese and European professional bodies (perhaps most notably FEE in this
latter case) all commissioning and/or producing papers exploring how accountants can and should integrate environmental issues into accounting practice. The professional accountancy magazines have reflected this increased interest in more (if intermittent) attention given to the subject. And accounting regulators have – to varying degrees in different parts of the globe – offered specific advice and guidance to their members on ways of dealing with specific elements of the environmental agenda as they affect the accountants’ work.

As has been observed elsewhere, however, there is a general absence – or paucity - of legislation and/or specific (and potentially mandatory) guidelines and this has meant that the rate at which environmental issues find their way into practice remains fairly slow, (see, for example, Bebbington et al, 1994; Gray et al, 1998). However, increased attention to environmental issues by regulators, the growth in importance of environmental management and the steady rise in environmental reporting are all contributing to a slow (but apparently inexorable) rise in accounting’s attention to environmental matters.

The professional syllabi are beginning to reflect these changes. Student magazines from the UK professional accountancy bodies (such as ACCA Students’ Newsletter and CIMA student) and student sections in the professional accountancy magazines are drawing students’ attention to environmental issues. More significantly, both ACCA (see ACCA, 1993) and CIMA (see Pizzey, 1998; Smith and Lambell, 1997) introduced some early reference to environmental matters in their syllabi. Now we see that current reviews by all of the UK bodies are in the process of raising explicit references to environmental (and social and ethical) issues in designated elements of the syllabi.

There is a sense in which this all presents a conflicting set of images. The high profile response by many of the accountancy bodies – many of whom have set up dedicated committees on these issues - plus this steady recognition of environmental – and related – issues in the professional training syllabi suggest a substantial and praiseworthy response by the accounting profession. However, evidence suggests that accountants in practice are neither active nor perceived to be innovators in the field.
We tentatively suggest that this apparent conflict arises from factors we have touched upon here (and elsewhere, see, for example, Collison et al, 1996; Gray et al, 1998), namely:

- the response by the professional bodies has been very diverse from the high profile leadership of ACCA to the less public responses by other bodies;
- the responses of the professional bodies were initially very general. Only relatively recently have more specific, function-related responses been in evidence. It is probably still too early to estimate the likely response to this steadily changing strategy;
- we might speculate that much of the accounting response was just that - a response. Only the ACCA took any major lead in environmental reporting in the UK and none of the bodies took the opportunity to sit in the driving seat of environmental audit and environmental management when the opportunity arose;
- accountants, as a generality, consistently appear reluctant to take initiatives without specific guidance. This says something about accountants and, more appositely, about their education and training;
- to date there has been little systematic and strategic positioning by the profession on environmental issues. It is thus unclear what the profession genuinely believes about environmental issues and how it sees them within a broader context;
- with the possible exception of ACCA and CICA there has, to date, been a reluctance to engage with the exigencies of sustainability.

That is, in the most part, environmental issues appear as optional to the accountant and, where they have greater urgency attached to them, the issues are treated in an entirely functional manner. As we discussed in chapter two, the evidence suggests that environmental issues are only relevant to the extent that they affect the financial performance and risk of the client and can be accommodated within existing accounting practices. It is not apparent that such responses could be construed as serving the public interest – if, indeed, accounting still aspires to being a profession.
Conclusions

After a generally slow and tentative start, the response of the professional accountancy bodies to the environmental agenda has grown steadily and is, currently, of some considerable substance. However, despite a growth in sponsored research into both the functional/marginal and strategic issues arising from the environmental agenda, it is probably fair to say that the accounting profession’s response has been characterised by a response to pressing needs within the extant parameters of accountants’ working practices. There would appear to be little in the profession’s response which might be characterised as strategic, as placing an intrinsic concern for environmental matters at the heart of the accountants’ agenda or which is moving towards embracing the sustainability agenda. Perhaps this is a proper response but – strategic issue apart – it remains fairly clear that the profession has been reactive and that accountants in the field have been slow and reluctant to innovate.

A priori, it does not seem inappropriate that the training syllabi of accountants is changing steadily and reflecting, in general terms, a very broad-brush introduction to environmental matters plus an introduction to those areas where environmental issues impact directly upon the accountants’ working practices. Such an approach may very well be understandable but it still leaves untended: the more constructive initiatives needed from accountants; the global issues of sustainability that accounting must address; and a strategic positioning for accountants across a wide range of issues (eg legislation, environmental management, increased corporate disclosure etc.).

Arguably, these are exactly the sorts of issues that university education is ideally suited to address. In a profession dominated by accounting graduates our focus in this project would be so much simpler (although still by no means easy). We could simply address what changes are needed in university degrees and how to begin to encourage university teaching to change in line with The Toyne Report.

However, as we have seen, not only is the UK accounting profession
relatively underpopulated with accounting graduates (even if they were the right undergraduates) but there are significant tensions between academe and practice that are some considerable way from resolution.

Consequently, we can make no assumptions about moves towards accounting-graduate entry to the profession nor can we claim to speak for practitioners and the professional bodies. They must speak for themselves and this they do in the next chapter.

Endnotes:

1. The situation in Europe is also far from homogeneous. The situation in the Netherlands would appear to be most similar to that in the UK but even here the proportion of trainee accountants who have studied accounting at university tends to be a majority. As far as we could tell (in a parallel enquiry for this report) Germany, Norway, Italy and, to a degree at least, France all require prior accounting studies at university for individuals intending to enter the accounting profession. Most European countries do appear to require some form of post-university examination(s) for membership regardless of prior education.

2. The reasons for this should be fairly self explanatory. Practitioners comprise the bulk of professional membership and thus have the dominant influence on the professional bodies who, in turn (as we have seen) have a probably very significant influence on university education. In addition, it is the practitioners who recruit the bulk of accounting students and, as we have also seen, there is a significant (if not always stated) tension between what academics want to teach and what recruiters want in their employees. We return to this later in this chapter and in chapter seven.

3. Gray and Helliar (1994) report that, in the early 1990s, over 50% of academics in the ‘old’ universities held professional qualifications while this figure was closer to 75% for the ‘new universities’. Those proportions had declined during the 1980s and probably have continued to do so. This, it seems to us, will exacerbate any tendency towards tension between academics and practitioners.

4. See, for example, Lyall (1985); Baxter (1988); Gray and Gee (1988); Zeff (1989b); Hunt (1989); Whittington (1995).

5. One interviewee from a professional institute was of the opinion that accredited material should account for no more than one half of a degree thus leaving the other half for wider and more academically-orientated material.
6. In the UK, some universities are able to claim up to this proportion from the professional examinations of ACCA and CIMA.

7. At the time of writing all the UK bodies either have revised or are revising their professional examination structure and syllabi. (Accountancy Age 6 April 2000, pp8–9).

8. Some of these issues come through in Shackleton and Walker (1998) but, for a more contemporary sense, the ICAEW perhaps illustrate this process most clearly. The titles of just some of their publications indicate the issue (note that many are undated and the dates suggested here are estimates): Developing the accountant in industry and commerce (1977); Education and training - A policy framework for the future (1981); Desirable attributes and aptitude testing and Technical knowledge and skills (1983); Planning for effective education and training in the 21st century (1985); Training in the smaller firm (1992); Chartered Accountant – The future of our qualification (1993); Safeguarding the future (1996); Added-value professionals (1997); Creating the added-value business advisor (1998). And see Paisey and Paisey (2000) for more detail.

9. One cannot avoid the irony of observing increased competition amongst the bodies that appears to increase at the same rate as the intensity and frequency of the talks about mergers between them.

10. For detail, see, for example, Geary and Rooney (1983); Coe and Merino (1986); Bandy (1994); Hardy et al (1994).

11. See, for example, Brilloff (1984); Zeff (1987); Bloom et al (1991); Simmons and Neu (1996); Bruce (1998).


13. See, for example, Gray (1990); Roberts (1991); Owen (1992); Macve and Carey (1992).

14. See, for example, Elkington (1998); Collier (1995); Spedding (1997).

15. A review of the latest syllabi from each of the UK CCAB bodies undertaken for this project found specific environmental reference in the ACCA syllabi on “Organisational Framework” and Managerial Finance” and, at the time of writing, their putative discussion document on accounting education seems likely to expand the Association’s (now) long-standing leadership in this area. CIMA’s syllabus exhibits references to environmental matters, stakeholders, social responsibility and ethics throughout. ICAEW make explicit reference to the environment in “Business and Financial Management” and their current proposals provide a higher profile
for stakeholder, ethical and environmental issues. CIPFA mention the social and political influences on organisations and make particular reference to social and environmental audits in their syllabi. The ICAS tradition of in-house training may account for the relative lack of published detail in their professional syllabus. Experience and the results of interviews led us to believe that environmental (and social) issues, while not explicitly mentioned in the syllabi, are not infrequently addressed in, for example, case study sessions.
Chapter Seven

Views from the Profession: Recruitment, Practitioners and the Professional Bodies

Before reporting on the detail of the material for this chapter it is probably worth rehearsing the sources of the complexity that have informed this report. There were, broadly, four sets of issues – conundrums if one prefers – which needed to be addressed. These were:

- **What is the nature of the ‘environmental issues’ we need to address?** The approach and conception of ‘environmental issues’ could be typified by two extreme approaches: ‘environment’ could be construed as a marginal issue not affecting the fundamentals of economic, social and financial organisation; or ‘environment’ could be perceived as a structural (sustainability) issue which could only be addressed through a root and branch analysis of the taken-for-granted assumptions underlying human experience in the developed world (Bergstrom, 1993);
- **What is the social role of the profession? what are accountants for?** Were we to approach this as a relatively simple question in which accountants were to be considered entirely in a functional client-serving capacity or were we to take a broader view of the profession and, in particular, take explicit cognizance of the profession’s duty to the public interest?
- **What is the purpose of education and training and do they differ?** Are we concerned about the level of accountants’ ability to undertake critical, independent, thought? Should accountants be well versed in the foundational issues of accounting and the bigger picture of which we are such an important part? Or are we to assume such liberal education occurs outside the accountants’ training and con-
cern ourselves with only the essential (and indubitably demanding) technical aspects of accounting?

- What is the role of pre-training education and, especially, the relevant degree? In essence this issue had two components: is the principle of the relevant degree attractive? are current relevant degrees delivering what is required (however that is to be determined)?

It was not with any deliberate attempt to make simple issues more complex that we have embraced this range of conflicts – the difficulty we have had in articulating all of the issues in an even-handed manner throughout this report would have been disincentive enough. But, if we had experienced any doubts about the necessity of adopting this complex approach and structure, it was entirely dispelled by the experience derived from the interviews and other work with recruitment personnel, practitioners, opinion formers and the professional bodies. The diversity of views expressed by the senior and influential individuals who were good enough to grant us time for interview was not insignificant. And the diversity clearly articulated that raising issues like the environment in the profession is certainly not simple, and our interviewees, in addressing our questions about the environment, typically alluded to (if implicitly) one or more of the conundrums we have identified earlier. What follows in this chapter reaffirms the approach adopted in both the research design and the structure of this report.¹

The chapter covers two, substantive but closely related, enquiries. The first of these was an investigation into the views of those involved in the recruitment of students to the profession. This element of the enquiry employed both interviews and questionnaires. The second theme of enquiry explored the views of senior practitioners, key ‘expert’ opinion formers from the UK and continental Europe and key members of the professional bodies. This interview-based enquiry was wide ranging and sought to cover views across the spectrum of issues concerning accounting, the environment and education.

This chapter is structured to reflect this and concentrates, principally,
on views and thoughts about the current situation. The suggestions for development and speculations about the future have been left, by and large, to chapter eight.

**Recruitment: what firms are looking for**

The recruitment of putative accountants by industry, commerce and practice is clearly a significant activity for the students concerned, for the future of the firms undertaking the recruitment, for the profession and for those providing the potential recruits – typically (and increasingly) the universities. The process has attracted occasional, though something short of detailed, attention by researchers.

Of consistent concern has been the characteristics which recruiters seek in their new trainees. In part, these characteristics will be shaped by what the firms want in a newly qualified accountant. A summary of this is provided in Table 7.1 which is taken from a MORI poll of ICAEW members conducted in or around 1996 on behalf of the ICAEW.

**Table 7.1 Most important skills for newly qualified chartered accountants**

<table>
<thead>
<tr>
<th>Preferred skills</th>
<th>Percentage of respondents</th>
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</thead>
<tbody>
<tr>
<td>Technical skills in accountancy</td>
<td>84%</td>
</tr>
<tr>
<td>Good interpersonal/communication skills</td>
<td>81%</td>
</tr>
<tr>
<td>Computer/IT skills</td>
<td>75%</td>
</tr>
<tr>
<td>Commercial awareness</td>
<td>71%</td>
</tr>
<tr>
<td>Understanding of the fundamental principles of accountancy</td>
<td>70%</td>
</tr>
<tr>
<td>Working knowledge of all areas of accountancy</td>
<td>56%</td>
</tr>
<tr>
<td>Business problem solving skills</td>
<td>54%</td>
</tr>
<tr>
<td>Experience in a wide range of practical situations</td>
<td>49%</td>
</tr>
<tr>
<td>Detailed knowledge in some areas of accountancy</td>
<td>20%</td>
</tr>
<tr>
<td>Project management skills</td>
<td>16%</td>
</tr>
</tbody>
</table>
In the context of this report, we should note that there are some striking absences from this list: independence of mind; creativity; critical thinking; integrity; ethical strength; and so on. (Although this may, indeed, be as much a function of the questions asked as of any apparent lack of explicit concern for these factors.)

Of greater direct concern to us here are the qualities that firms seek in their new entrants to the profession.

Interview responses

As would be expected, there were elements of both diversity and commonality in the interview responses from the recruiters. On the general issues arising in recruitment, all the recruiters demonstrated a particular interest in pre-university results and characteristics beyond academic achievement. However, all the Scottish interviewees also demonstrated a positive attitude towards the value of the relevant degree:

... it gives students a basic knowledge, an understanding, and shows a commitment to the subject, a dedication (Partner, medium Scottish Firm)

Interviewees’ reactions to the desirability of wider education values - such as critical thinking and having studied business ethics (a list of issues drawn directly from the AECC recommendations) - was somewhat mixed. Whilst there can be no claims about the generalisability of these interviews, it did seem as if the smaller the firm, the more likely the recruiter was to give primacy to ‘practical’ skills. One small firm partner was particularly adamant on this matter:

... Students are lacking in the practical side of knowledge, they need to be more mechanical in their approach. Universities want to concentrate on what recruiters want rather than focusing on what they perceive they should know ...

The recruiters interviewed demonstrated no great enthusiasm for the study of environmental accounting. Whilst two interviewees could see
that the matter may become more important, was of some (though slight) increasing relevance to clients and might be thought of as providing “a different outlook”, others saw it as irrelevant at best and, at worst, potentially distracting. One particularly robust view was expressed by a medium-sized firm interviewee:

... I’m worried about students becoming too indoctrinated by environmental accounting. It is too political ... I’m against being pushed in any political way ...

That the interviewee might find environmental accounting “political” but not find maximising shareholder wealth at least as “political” was not a matter pursued in the interview. If one were to try to typify reactions to the increased attention to environmental issues in accounting it might best be represented as a seriously reluctant acceptance that such issues are gaining an (unwelcome) increasing prominence in the profession.

Finally, a subsidiary question which was perceived as of relevance to this part of the enquiry related to the quality and form of the communication between recruiting firms and potential university student recruits. Whilst such an issue very probably deserves a systematic enquiry of its own, it did seem necessary to gain some insight into whether or not university – especially relevant – graduates were receiving a broadly accurate message about what the recruiters wanted. The recruiters interviewed were fairly clear, however, that they did not feel that students were getting the full message and that it is the responsibility of the student to close that gap:

... there is a huge gulf between what we want as a firm from students and what they perceive is needed ... (Small Firm)

we expect some homework from the students so they know about the firm and what is expected from … training ... (Medium Firm)

A crucial intervening variable, it would seem, is the university’s careers advisory service and, although contact was made with one such service as part of this enquiry, more detailed, widely drawn and more subtle contact would probably be necessary if any substantive conclusions are
to be drawn. The impression gained from this part of the enquiry was that students perceive that they are receiving the correct message from recruiters but are not, in fact, understanding it correctly. More work needs to be done on this issue.

Questionnaire responses

On the basis of these interviews, a postal questionnaire was derived, piloted in five further interviews (as well as with staff colleagues – see Chapter 1) and dispatched to just over 200 firms of accountants. The summary results are shown in Table 7.2.6

Table 7.2 Recruiters’ ranking of desirable attributes in student recruits

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Mean score* (n=92)</th>
<th>Rank</th>
<th>Simon &amp; Kedslie (1996) Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral communication skills</td>
<td>4.67</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Integrity/High ethical standard</td>
<td>4.66</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Written communication skills</td>
<td>4.29</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Drive and motivation</td>
<td>4.28</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Energy and enthusiasm</td>
<td>4.26</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Professional appearance and presentation</td>
<td>4.24</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Ability to work in a team</td>
<td>4.23</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Interpersonal sensitivity/skills</td>
<td>4.10</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Numeracy skills</td>
<td>4.04</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>‘A’ level/Higher grade performance</td>
<td>4.01</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Problem solving skills</td>
<td>3.99</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Confidence</td>
<td>3.84</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Reacts positively to pressure</td>
<td>3.80</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>University with above average academic reputation</td>
<td>3.18</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Student studying for a relevant degree</td>
<td>2.72</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

* On a 5-point Likert scale: 1= not at all; 5= to a great extent.
A number of comments about the results in Table 7.2 are appropriate. In the first place, there are no major surprises when compared with the Simon and Kedslie study (see also Simon et al, 1996; 1997) – although “integrity” has apparently risen in desirability whilst team work has (implausibly) fallen in importance. As with Simon et al study, perhaps the most notable observations from Table 7.2 are: the strength of preference expressed by the respondents for the social, communication and personal skills; and the low ranking of the relevant degree.

The results of the present survey were examined for differences between three sub-groups in the respondents: Scotland/ England and Wales; Big 5/non-Big 5 (although it was Big 6 at the time of the survey); and partner/manager.

From our point of view the most important result in Table 7.2 is the confirmation that very few recruiters see relevant accounting degrees as being of much interest. (Indeed, 18% saw the degree as being “not at all” attractive). However, this differed between the sub-groups. Scottish respondents were significantly more in favour of the relevant degree that non-Scottish respondents (2-tailed significance = 0.000). This was the only issue in Table 7.2 on which this national difference was apparent. Equally, whilst respondents from the non Big 5(6) firms as a whole are not overwhelmingly enthusiastic about relevant degrees they are significantly more enthusiastic than the Big 5(6) respondents (2-tailed significance = 0.036).

Further sections of the survey looked more closely at this issue of degree relevance and at attitudes to environmental issues amongst recruiters.

On the matter of the relevant degree, whilst 35% of the respondents expressed some preference for relevant graduates, these views were confirmed as clearly strongest amongst Scottish accountants and non-Big 5(6) firms. One questionnaire respondent provided, what we think may be, an important general insight into this result:

We recruit both accredited and non-accredited students. The former are cheaper to train, a considerable benefit, but many non-relevant graduates are, perhaps, more rounded and mature, and they tend to
have a very committed approach. We definitely need students to have better critical faculties— and personal skills at the initial recruitment stage are likely to weigh more than pure accounting skills (Senior Manager, Scottish Firm)

The vast majority of respondents were largely indifferent about whether or not students should have greater theoretical knowledge and whether such knowledge was a hindrance to the student. On the other hand, 63% of respondents wanted accounting graduates with greater practical knowledge of accountancy—a preference more apparent amongst Scottish and non-Big 5(6) firms. 67% of respondents place greater emphasis on personal rather than accounting skills in their recruits whilst a significant 77% wanted to see accountancy students exhibiting greater critical thinking ability.

On the matter of accounting graduates having exposure to environmental issues, respondents were generally indifferent one way or the other. Further, despite respondents showing a very positive belief that the profession should be involved in the environmental agenda and (to a lesser extent) seeing environmental issues as a public interest matter,7 less than 10% of respondents thought that failure to cover environmental issues in a student’s studies left them with a gap in their education. The different sub-groups of respondents demonstrated no apparent significant differences on this matter.

The inference suggested by these results echoes the themes from the rest of the project. Recruiters do not appear to like relevant accounting degrees, tend to be interested in personal, rather than accounting, skills and attributes, are (at best) indifferent towards theory and largely uninterested in environmental issues as part of a student’s education. To this extent, we would be led to speculate that accounting students are correctly perceiving that newer, more innovative, more independently challenging courses add nothing to their employability.

But we would also note that this is neither homogeneous across firms and, more significantly, that firms are probably giving conflicting messages. The most important of these is that related to “critical thinking”. It looks to us as though accounting students are not
picking up this message that critical thinking is seen as desirable. It is our contention, however, that many firms would not want a truly "critical thinking" graduate and that what is meant by this term (in much the same way as "the public interest") needs more full and careful investigation. It certainly seems to be the case that recruiters do not see an education which includes environmental issues as contributing anything important to critical thinking – a view we would wish to challenge (see, for example, Gray et al, 1994).

Practitioners, opinion formers and the professional bodies

If the message from our examination of the recruitment process held few surprises, the array of views held and expressed by the range of practitioners and experts we talked with substantiated our decision to approach this project with an explicit recognition of its complexity and the diversity of opinions that it generates. In an attempt to make some coherence of the views expressed, this section is organised broadly around the four key tensions with which we opened this chapter (see also Chapter 1)

Environment – marginal or structural?

In only three of the interviews were the questions of sustainability given any substantial attention and, for reasons of politeness as much as anything else, we did not attempt to establish whether this led to the justifiable inference that all the other interviewees were relatively unfamiliar with the concept. Of these three, only two developed the implications to the point where they recognised that fundamental issues like growth, consumption and business and economic organisation required careful reconsideration.

*It is important to recognise the extent, diversity and the complexity of sustainability issues ... fair trade, animal testing, land rights, control of multinationals, exclusion, etc, as well as the more obvious environmental issues. ... Many members of the accounting profession do*
see the necessity, likelihood and desirability of fundamental change in the profession and in accounting. [Big Five consultant]

Whereas one of those who was well versed in matters relating to sustainability stated:

Sustainability is beginning to crawl up the agenda. Triple bottom line is beginning to capture attention. Nobody understands sustainability although a few are beginning to think about how to operationalise sustainable development. Sustainable development does not (and cannot) challenge the fundamentals of business [Ex-Big Five consultant, Emphasis added]

Two other interviewees, who did not rise to the sustainability issues, nevertheless recognised some of the fundamental issues at stake and argued that environmental issues do raise questions over the nature and desirability of, for instance, economic growth and the virtual impossibility of separating environmental and social issues.

These relatively radical views contrasted with the more widely held perception that environmental issues were “just one more issue” to which attention must be paid. As one interviewee said, environmental issues should:

... not be overdone but they should form part of the training ... Because environmental issues can have a serious impact on operations and on financial developments. ... I would never see the other forms of the triple bottom line reaching the same significance as the economic result, the financial result ... [Senior staff member of professional body]

Whilst another expressed it:

... deep green stuff is not relevant as part of accountants’ training ... I would be more pragmatic and just put the emphasis on what [the students] could expect in the financial statements [Senior staff member of professional body]

and a third stated:

I’m not saying that environmental issues are not important but it
has got the same level of importance as a lot of other things that are building blocks [Senior staff member of professional body]

These quotes give a flavour of the range of views. But it does not seem to be stretching a point if we maintain the distinction between environmental issues as ‘marginal’ or ‘structural’. Perception of environmental issues as structural appears to bring with it a re-appraisal of many of our most fondly held and fundamental assumptions about economic organisation and, similarly, seems to be related to a willingness (even a determination) to conceive of the accountants’ role in terms wider than simply serving the clients’ needs. Maintenance of a ‘marginal’ perspective places environmental issues alongside many other matters with which accountants have to deal, leads to no re-questioning of fundamentals and, it would appear, leaves the determination of the accountants’ agenda with the clients that the accountant serves. This sees all accounting as limited and relatively unchanging, thus:

... accountants will need to learn how to measure performance against those new goalposts. Although this may not mean that traditional measurement approaches need to change [Ex-Big Five consultant]

... [accounting] involved running and evaluating a business efficiently with proper regard for caution and prudence …[on the other hand] auditors were less concerned about how resources were used as long as things were properly reported [Senior staff member of professional body]

The dominant view would appear to be that environmental issues are, indeed, “marginal” issues and can only be examined through the lens of clients’ (generally immediate) needs. This is not a surprise – but it is a concern. It is a concern because, by implication, it appears to deny the possibility that there may be a wider agenda – a public interest agenda of sustainability – that the profession needs to serve.⑨

The profession and the role of accountants

The work undertaken for this project did not specifically seek to collect views on fundamental questions such as the role of the accountant.
To have included a question in the interview template (see Appendix Instrument A) dealing directly with perceptions of the essential nature of the profession would have made the interview process unwieldy – if we had even considered it seriously before the project started. As the work progressed, however, we became increasingly aware that such issues were crucial and, to a significant extent, appeared to underpin the way in which respondents chose to discuss the issues. Of particular significance, there appeared to be something approaching consensus amongst our interviewees as these quotations from three different interviews suggest:

... accounting is a pragmatic subject which reacts to consumer pressure
... it is the competitive and technical issues which drive professional bodies’ syllabuses [Senior staff member of professional body]

... accounting and auditors are business advisers who can add value. [Senior staff member of professional body]

... it’s nice [for accountants] to have the wider concepts but they can’t use them. [Senior staff member of professional body]

Such pragmatism and client orientation was clearer still with regard to environmental issues:

... environmental issues are part of getting to know the client’s business. [Audit Partner, Big Five Firm]

In so far as environmental issues increase the area of client risk we need to try to bring them in. [Audit Partner Big Five Firm]

Environmental issues are only significant in that they can eventually in time ... affect the financial results ... Business is about an economic result, I think one has to be realistic. [Senior staff member of professional body]

In addition, three interviewees specifically likened environmental issues to fraud\(^\text{10}\) in that any explicit inclusion of such matters in
syllabi or similar professional documents would raise expectations that accountants were responsible for them. Two of these three saw this as highly undesirable, one saw it as inevitable.

The point at issue here is not so much the pragmatism and client-serving orientation as the virtually complete absence of any references to duties, public interest, accountability, serving society or whatever. (Only three interviewees raised these questions at all.) Whilst the interviews were not specifically designed to address such issues, it seems reasonable to us that in speaking about other things – such as environmental issues – well-informed, able and influential members of the profession will draw from their intrinsic and implicit views about what it is to be an accountant. In so far as we can legitimately draw such an inference, we would conclude that wider concepts, ethical and theoretical foundations do not inherently inform accountants’ discussions.

Disturbing though this may be for some, in the light of our discussion – especially in chapters two and six – it would come as no surprise. This may, indeed, be one of the few areas we have covered where a conclusion based on consensus may be possible. That is, despite the views of educationalists, theorists, ethicists, despite the evidence from economic and social analysis, and despite the accountants’ claims to be a profession and the stated dedication to the public interest, accountants might be adjudged to share a collective view that accounting is quintessentially about measurement and serving clients. If consensus is what is required then here is a potential candidate – the role of the accountant is to serve the client and, to the extent that environmental issues are affecting clients, then accountants must be informed about them. Seen in this pragmatic light, the policy implications for environmental issues within accounting and accounting training are relatively straightforward (see Chapters 2 and 8). However, such a pragmatic outlook does not deal with either the crucial question of whether accounting should take a broader and more public-interest-motivated role or the more practical question of whether and how such issues can be integrated into the accountants’ training. We consider respondents’ views on this latter matter before we look at education and the role of the relevant degree
in the subsequent sub-section.

Education or training?

At the heart of any discussion of accounting education and training, as we have seen, are two central issues: pre-professional training educational experience; and the current pressure on the already overloaded professional syllabi. The latter issue is an issue of considerable attention at the present time involving exploration of ways in which to re-direct the nature of professional training in the light of the significantly overloaded syllabi. The role of prior degree studies is dealt with in the next sub-section and perceptions of education and training are dealt with here.

It is not possible – or appropriate – to rehearse the extensive re-appraisals that the UK professional accountancy bodies have been undertaking of their professional syllabi and their training strategies. (For a brief introduction, see Chapter 6). These have covered such matters as “core knowledge and skills”, “learning to learn”/“life-long learning”, streaming and specialisms, continuing professional/post-qualification education and the tensions of accountants as general business advisers versus a more specific role of technically-competent and well-educated accountants. Each of these raises, as we have discussed, how the profession sees itself and wishes to re-imagine itself for the future. In addition, there are very real practical problems given that accountants now serve in such a wide array of functional activities and that the historical areas in which accountants have been assumed to have technical expertise have grown so considerably in recent years. It has become virtually impossible to ensure that all new accountants have the range of knowledge and skills that even a pragmatic view of the profession would demand. How then to deal with additional new issues such as the environment whilst at the same time dealing with an increasing disquiet about the narrowness – and other observed deficiencies (see Chapters 4 and 6) – of the accountants’ background? As we see later, the most obvious solution – development of the relevant degree – is a relatively unpopular one. How, if at all, are environmental issues then
When the interviewees’ beliefs about the introduction of environmental issues into accountants’ training are examined, a distinct source of tension emerges. In the first place, all but one of the respondents were broadly supportive of the idea that accountants need to know something about environmental issues. The following quotations give a flavour of this point of view:

... environmental accounting should be part of an accountant’s training... [Senior staff member of professional body]

[Issues such as] eco-efficiency, sustainability, products, purchasing etc, all ... need the accountants to cost options out and to cost up the business case [Ex-Big Five Firm Consultant]

Environmental issues are very important and should have explicit inclusion in training ... [Audit Partner, Big Five Firm]

... all accountants should have a basic level of expertise in environmental issues. [Audit Partner, Big Five Firm]

Views were far more diverse on the matter of where such issues should be included. Approximately half of the interviewees would like to see the environment within the professional syllabus. These interviewees tended to lean towards the integration of environmental issues into the different elements of financial accounting, auditing, management accounting and investment appraisal for example. As one audit partner said:

It must be part of the professional exam. My belief is that if it is not, it’s not tackled in the same way as some of the other subject matter ...

Only occasionally did any of this group of interviewees touch upon the notion of environmental issues being treated either as a separate issue or as part of the whole raft of fundamental questions (such as ethics and social responsibility, for example). Such views are re-considered later when we touch on the apparent tensions in views and the role of
relevant degrees.

The rest of the interviewees expressed substantial doubts as to whether or not environmental issues should appear within the examination syllabus. As one senior staff member of one of the professional bodies said:

*The syllabus cannot cover everything that’s relevant ... and fundamental questions should not be in there.*

We have already referred to those who are anxious about the addition of such new material increasing the already excessive expectations of accountants. If environmental issues were to be covered in the training of accountants, interviewees were of the opinion that they could be covered in one of three ways: in postgraduate/diploma/post-qualification education of some sort; in pre-professional education; or by other means during the students’ professional training.

Three respondents favoured the post-qualification route on environmental issues. In particular, the notion that qualified accountants should be sponsored by their firms to undertake either general or specific post-qualification training exercised three of the respondents. Such post-qualification education did not seem to be in much evidence in the interviewees’ experience but the possibility existed. Whether there was any advantage to this over, for example, simply recruiting from specialist degrees in the first place was raised by other respondents. In addition, two respondents were concerned that a development which led to a few members of the profession, being well qualified in a specialist area like the environment did not address the fundamental issue that *all* accountants needed to have a basic environmental awareness.

If then, trainee accountants were not to receive an introduction to matters like the environment in their formal examination training, from where would they acquire it? If it were not to come through from the relevant accounting degree (see later), as one or two interviewees suggested, it was far from clear how it could happen at all. An environmental awareness would, it seemed, have to be acquired in some rather more remote, instinctive, almost osmosis-like manner. Only one
interviewee seemed keen to explore this apparent tension:

... we often have discussions as to how and where people get their ethical training from because although you have independence issues covered here in a lot of detail ... I am not sure we cover ethics. We assume the people we are recruiting are ethical ... [environmental issues] are tied up with ethical behaviour ... There is a whole range of things, soft subjects, that I think accountants should be aware of but I just don’t think they get that sort of training ... I don’t see it coming through with somebody sitting opposite me and discussing these issues ... [Audit Partner, Big Five Firm]

Such views do, it seems to us, raise the distinction between education and training. As we discussed in chapters three and four, it is the role of education to supply the broad, critical and reflective elements and for training to provide specific and technical skills. As one respondent said:

... university education ought to be looking well forward, so not just at the accountancy standards of today but the potential accounting standards of tomorrow ... on environmental issues you are going to have to be thinking forward ... [Senior figure in the profession]

The examination papers, the forms of examination and the way in which teaching for the examination takes place can vary considerably across the professional accountancy bodies and, in that variety, place considerably different emphasis on education and/or training. In this connection respondents’ views again varied and, in so far as we could assess, demonstrated a degree of confusion. So, on the one hand, there was a significant interest in the “way in which students learn” and a significant, and entirely unprompted, concern with both “whether students are taught by the right people” and the “compartmentalisation of education/teaching”. If these views are widespread there is clearly some work to be done here. On the other hand there was a diversity of views on just how far the “educational component” of education and training can go with one interviewee saying:
There is an essential role for the steady increase in education – not just on the specifics but on the ubiquity of the sustainability agenda.

[Big Five Consultant]

Whilst another was clear that:

Radical views are not acceptable from education or anywhere else. Accountants are traditional and involved in traditional activities. They do not have a creative role. [Ex-Big Five Consultant]

It seems self-evident to us that if there is a role for education then the role of the relevant degree needs to be carefully examined. However, as the last two quotations illustrate, we are a long way from consensus on such degrees.

Role of relevant degrees

Amongst the range of individuals interviewed, there were, broadly, three points of views on the relevant accounting degree. Two interviewees saw no intrinsic value in requiring graduate entry (whatever the degree) at all – at best they appeared to be indifferent on the subject. The majority appeared to accept that graduate entry was either inevitable or desirable but saw no particular advantage to relevant degrees. This left us with a small group to whom the accounting degree remained highly attractive – but here the concern was strongly expressed as to whether accounting degrees were doing the “right job”.

For interviewees in most European countries outside the UK, the idea of accountants not in possession of an accounting degree appeared to be almost unthinkable. In England and Wales (in particular) and amongst those who did not themselves hold an accounting degree (a potentially influential factor in determining viewpoints, apparently) interviewees could see no point to accounting graduates. (As far as we could assess, this view related, in part, to any imaginable accounting degree – not only a dissatisfaction with current accounting degrees.)

... we are not great fans of accounting degrees, because people who come here with accounting degrees are not usually as good as people with non-accounting degrees for various reasons. [Audit partner,
I must declare a very strong view on relevant degrees, I actually like people who have done something else. [Senior staff member of professional body]

... relevant degrees are mis-specified – [relevant graduates] aren't numerate and fail stuff due to getting unwarranted exemptions ...
[Senior staff member of professional body]

A more conciliatory view, expressed by some, saw value in a range of undergraduate degrees being held by entrants to the profession – even though a minority of these may be ‘relevant’.

Equally relevant was the role of academic accountants – on the grounds that if there are few relevant graduates there will be fewer accounting academics. As we discussed in chapter six, it may well be a majority view that practitioners do not know what accounting academics are for but a minority of respondents did see a crucial role for academics in both exploring new issues and in encouraging and leading change in the accounting agenda.

Those few who expressed clear support for the relevant degree did so because of the essential role, as they saw it, for an educated profession with a wide and substantial background in the context and fundamental issues of accounting and finance. It is here, they believed that basic questions about economic organisation, ethics, social responsibility and the environment should be dealt with. But even here, there was confirmation of what we inferred in chapter five: accounting degrees are not fulfilling their potential.

The job of the universities is one thing, the job of training for a profession is another. But you observe universities becoming more pseudo professional in their degrees ... I would say that the students that we have the most difficulty with in thinking independently are students who have come from universities [with] solid accounting degrees ... and if you asked them a challenging question, they can’t answer it. I don’t mean a technical challenging question, but something that requires a discussion of wider issues. [Senior staff member of
Whilst it seems unlikely that all the UK professional accountancy bodies will move towards a preference for accounting graduates in their recruitment, we are left with a question over whether, if accounting degrees were able to change substantially, the UK professional bodies would be keener to increase their accounting graduate entry. The problem is which is the chicken and which is the egg? It is not that inclusion of environmental issues in accounting degrees will make more attractive undergraduates but it might well be the case (as we hinted in Chapters 4 and 5) that a degree in which environmental issues could naturally be discussed might well be a more stimulating educational experience and produce more interesting (and able?) undergraduates.

In chapter eight we will attempt to synthesise these (and the foregoing) views and seek to identify ways forward for the profession.

Conclusions

On the face of it, there are no big surprises in the investigations reported in this chapter. The UK accounting profession wants bright recruits with strong social skills. The profession sees little importance in relevant degrees and is largely indifferent on the matter of environmental issues in education. We could probably have predicted this result.

However, the results do reaffirm the continuing Scottish attachment to the relevant degree – although there is some significant doubt as to whether or not the relevant degree is achieving the right balance. A not dissimilar view is inferred from the non-Big 5(6) firms – although the reasons for this may be a little different.

We believe that there are further points to be taken from this chapter. In the first place, we believe that we should not simply accept this relative indifference to both relevant degrees and environmental issues. There is a significant minority of respondents who share this view – namely that there is something wrong with a profession that does not want its new recruits educated in matters pertaining to the profession and this, in turn, lends weight (we believe) to the anxiety that what is being taught in
accounting degrees is neither fish nor fowl. On environmental issues, this minority of respondents leads us to infer that we have *not* misplaced our anxieties that: environmental (and social) issues offer an important basis for the development of critical thinking; and are far more intrinsically important than respondents appear to recognise.

There is certainly much more research to be done on the matter of “critical thinking”. This phrase (or its analogues) appeared frequently in this part of the investigation. But they did so in a manner which suggests that respondents saw no conflict between such thinking and the absence of a relevant education and/or the profound challenges of sustainability. Our only conclusion can be that respondents mean something quite different from what we understand by the term “critical thinking”\textsuperscript{13} and few respondents understand sustainability.

Moving onto our attempts to synthesise this project (in Chapter 8), we are exercised by the relatively novel hypothesis that the traditional breakdown of the profession along such lines as: professional institute affiliation; size of firm; and, most especially, academic/practitioner; is obscuring an important series of points. That is, there might be three categories of preferences for recruits: practical, job-ready individuals; non-accounting broadly educated; and professionally - and widely – educated accounting graduates. These three categories need better definition but, if we are correct, although there is some evidence of a size/affiliation/function relationship – a more productive recognition would derive from the realisation that this cuts across the traditional categorisation of accountants. Such a view would certainly reduce some of the non-productive battling across (particularly) academic-practitioner lines and perhaps move us towards a situation in which more intelligent conversations could be held about the *real* issues of long term relevance to the profession.
Endnotes:

1 As, indeed, the ICAS Environmental Issues Working Party and the ICAS personnel had intimated at the start of the project.

2 The following material on recruitment is primarily drawn from work undertaken for a Masters of Accountancy by Research dissertation, (French, forthcoming). The detail of the research, literature and methods will be found in there when that dissertation is complete. At the time of writing, the dissertation was not yet completed and, consequently, only some of the detail from the investigation was available to us. This partly explains why only an overview of the results is given here. (The other reason is the more obvious one of space and the overall length of this report). It is hoped that a research note for publication will be produced from this material in due course which will put the detail into the public domain.

3 See, for example, Paolillo and Estes (1982); Hartman and Ruhl (1996); Novin et al (1997); Morgan (1997); Gammie (1999).

4 As so often with professional and/or consultancy publications, details such as dates of the survey and dates of publication are not supplied.

5 Taken from MORI Survey of Members; views on Education and Training (London: ICAEW) 1996.

6 The survey instrument is reproduced in the Appendix, Instrument E. The questions to which Table 7.2 refers were taken directly from a paper presented at the 1996 BAA Conference which reported the results of survey of 272 firms conducted by David Simon and Moira Kedslie. The results reported there are very closely comparable. See also Simon et al, (1996; 1997).

7 Scottish accountants were less convinced of the link between environmental issues and the public interest. Although this is counter-intuitive it does echo prior research (Bebbington et al, 1994) and probably is more dependent upon how respondents understand the term “public interest”.

8 The distinctions made here between ‘opinion formers’, practitioners, experts and the professional bodies is clearly arbitrary. For example, a senior member of a professional body will have close experience of practice, will speak for the professional body concerned, and may very well also be a significant expert in the environmental field. The purpose of the distinction is simply to try and bring some clarity to the discussion here. The material in each of the sections has been split along the lines of whether the individual’s specific comments related to their professional institute, its examinations, syllabi and procedures or not. The comments of some key individuals appear in more than one section of this chapter.

9 To make matters more complicated still, we were unable to map interviewees’ views on the light green/deep green spectrum to their views on the role of the profession on the client/public interest spectrum. Life is rarely organised into the tidy compartments so beloved of we academics.

10 This comparison illustrates our problem exactly. Fraud, although a significant issue is probably not often considered to be central to the continuation of life on this planet
- sustainability is. The comparison illustrates, we believe, the essentially marginal nature of environmental issues in most respondents’ minds.

11 A senior staff member of one of the professional bodies wished that environmental issues be downplayed. Their only importance lay in the effect they had, along with other issues, in affecting client risk. The syllabus was not the place for such issues.

12 This, of itself, should not be surprising. There is, inevitably, a distinct element of sample selection bias in those we chose to approach for interview and there is almost certainly a degree of self-selection bias on the part of interviewees. The existence of that bias is probably confirmed by the different sense obtained from the ‘practitioner’ and ‘recruiter’ interviews. The latter were approached on the basis of recruitment issues – not environmental issues – and it is thus unlikely that the same selection bias would be present.

13 In the interests of transparency we should emphasise what we understand by the term ‘critical thinking’—as it may not be entirely clear where our allegiances lie (but see Chapters 3 and 4). We take the term to mean the capacity of an individual to analyse and deconstruct taken-for-granted assumptions, to understand the nature of these and to come to reasoned choices about them. Such issues include the nature of international capitalism, the political and social role of the accounting profession, the purpose of financial statements etc. Critical thinking does not equate with, for example, extreme socialist or environmental beliefs but does involve and understanding of those positions. In essence, it is the capacity to resist indoctrination.
Chapter Eight

Looking to the Future: Synthesis, Conclusions and Recommendations

This report has addressed the question What do accountants need to know about the environment? This apparently simple question proved to be a great deal more complex than it looks. In particular, we identified four primary areas of unresolved tension, without which the initial question could not, in our view, be sensibly considered. These four areas were outlined in Figure 1.1 - which is repeated here as Figure 8.1.

Chapter two introduced the environmental issues and highlighted the essential tension in any environmental discussion over whether we saw such matters as “marginal” or “structural”. Our view is that they are structural, the majority of those we spoke with saw them as marginal. Chapter six, in particular, introduced the tension, as we see it, between a profession whose primary function is to serve clients and one whose raison d’être is to serve the public interest. It is our belief that there are potential conflicts between these two points of view. The public interest is a sine qua non of the profession but the majority of those we spoke with saw serving the clients as their primary function. To the extent that they had thought about it, very few of those we talked with were aware of potential conflicts of interest. Chapters three and four looked at education issues and raised the tension between “transcendence” and vocational education. Within accounting there is a major emphasis on the vocational, and, indeed, on a technical approach to that vocational material. There is increasing disquiet over this. Notably, a number of respondents from both academe and practice saw an element of “transcendence” in accounting education as essential to the health of the profession. That, in turn, raised the question of relevant degrees and this was examined in chapters five and seven. We see the question of relevant degrees as absolutely pivotal to the discussions in this report.
but have had to recognise that this is a minority view in the UK. We do recognise (and sympathise with), however, the view that relevant degrees are not currently fulfilling their potential.

In this final chapter we will attempt to synthesise the foregoing seven chapters and suggest some ways forward. The issues which we are trying to address in this report are far from simple. Our suggested solutions are also, therefore, far from simple. Our suggested solutions, also, represent a minority view amongst accountants – in so far as our research has correctly sampled views. We make no apologies for this. If we have one central contention it is that the accounting profession has consistently avoided addressing a number of fundamental questions and that discussion of education, environment or whatever must ring hollow in the absence of clarity – or at least recognised confusion – on those issues.

We should perhaps stress two things from the outset. First, we are more concerned to stimulate a deeper and more penetrating debate within the profession than we are to push some particular agenda. Second, we do not see that the dichotomies that we have set up (see Figure 8.1) are necessarily mutually exclusive: we tend to think that accountants need to know about environmental management and sustainability; we believe that accountants must have both transcendence and vocational education; we recognise that practitioners must serve clients and that the profession must serve the public interest ... and so on. We are primarily anxious to raise these tensions within visible debate.
This chapter is structured as follows. The next section provides a brief summary of the main findings from the research component of the project. Then follows a section in which we address, in a more direct manner, the “bigger picture” of public interest, sustainability and education. We then turn to discuss areas for change and, in what we hope is a persuasive manner, suggest how we might move forward on environmental issues and education. We do this in three sections. First we present our initial recommendations. These are characterised in terms of immediate concerns, client-serving issues and longer term (sustainability) issues. The final two main sections of the chapter re-visit the relevant degree and make a series of fairly bold recommendations for professional leadership.

Finally, an Addendum to the chapter makes some suggestions about how the more practicable of the intermediate recommendations on education and training made in this chapter could be developed by university and professional teachers.¹

Overview of conclusions

At the risk of over-simplifying the outcomes from the diverse range of enquiries we undertook for this project, we attempt to summarise the general findings in Figure 8.2.

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¹ Addendum to the chapter makes some suggestions about how the more practicable of the intermediate recommendations on education and training made in this chapter could be developed by university and professional teachers.
### Figure 8.2  Summary of general findings from the project

<table>
<thead>
<tr>
<th>Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-accounting academics</strong></td>
</tr>
<tr>
<td>• Unless deep-green by belief, see environmental issues as marginal and probably adequately covered in specialised courses;</td>
</tr>
<tr>
<td>• Why prioritise the environment?</td>
</tr>
<tr>
<td>• Sustainability not understood and not a motivating factor;</td>
</tr>
<tr>
<td>• <em>Toyne Report</em> has little impact;</td>
</tr>
<tr>
<td>• Self-discipline, lack of knowledge/awareness, inertia.</td>
</tr>
<tr>
<td><strong>Accounting academics</strong></td>
</tr>
<tr>
<td>• No major change in last few years;</td>
</tr>
<tr>
<td>• No major impediments to introducing environmental issues;</td>
</tr>
<tr>
<td>• Environment grown in importance but not seen as crucial;</td>
</tr>
<tr>
<td>• Why prioritise the environment?</td>
</tr>
<tr>
<td>• Views of accounting and education important.</td>
</tr>
<tr>
<td>• Life is too hard for innovation - simplicity sought.</td>
</tr>
<tr>
<td><strong>Undergraduates</strong></td>
</tr>
<tr>
<td>• Choice of course is a function of interest and orientation;</td>
</tr>
<tr>
<td>• Majority choose courses by perceived career relevance;</td>
</tr>
<tr>
<td>• Environment not seen as career relevant;</td>
</tr>
<tr>
<td>• Environment not seen as especially interesting;</td>
</tr>
<tr>
<td>• (Perceived) career values more influential than independent personal values;</td>
</tr>
<tr>
<td>• Views of what comprises accounting are important.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Practice and the professional bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recruiters</strong></td>
</tr>
<tr>
<td>• Rarely see value in relevant degrees;</td>
</tr>
<tr>
<td>• Indifferent on environmental issues;</td>
</tr>
<tr>
<td>• Social skills far more important than accounting skills;</td>
</tr>
<tr>
<td>• Scots and non-Big 5(6) more pro-relevance and practicality than others;</td>
</tr>
<tr>
<td>• Favour ‘critical thinking’ and broad education.</td>
</tr>
<tr>
<td><strong>Practitioners, opinion formers, professional bodies</strong></td>
</tr>
<tr>
<td>• Accountancy is a client-orientated activity;</td>
</tr>
<tr>
<td>• Effect on client principal determinant of interest in environment as anything else;</td>
</tr>
<tr>
<td>• Why prioritise the environment?</td>
</tr>
<tr>
<td>• Environment seen as marginal but increasing in importance;</td>
</tr>
<tr>
<td>• Sustainability not widely understood or recognised as important;</td>
</tr>
<tr>
<td>• Majority see no point to relevant degrees;</td>
</tr>
<tr>
<td>• There is a steady growth of environmental activity in the profession - but it is very ‘marginal’ in nature.</td>
</tr>
</tbody>
</table>
Although there are a number of practical matters referred to in Figure 8.2 (most notably inertia in education and the pragmatic concerns over “getting a job done”), to our mind, the central implications of this summary are that: we are considering differing perceptions of some fundamental issues – the nature of accounting, the nature of education and, most crucially in the present context, the priority to be accorded to environmental issues; and these differences in perception arise – we believe – from differences in education, understanding and knowledge about these matters. We stress again that it is not the differences that are of relevance here, but rather the lack of informed debate about those differences. To us, that seems, self-evidently, a matter for education.

We attempt to clarify this point in the next section.

Public interest and the wider picture

Although we tried to be even handed throughout this project, it is now time to come down off the fence. Our view is that the “profession” and “practitioners” are not synonymous categories. Practitioners have jobs to do, livings to earn, clients to serve. They need to do this with considerable care and competence and to the highest ethical standards. The profession must, by definition, serve the public interest. To do that it must define what the public interest is and how accounting, in whatever form, can best serve it. However it is defined, it seems more than likely that conflicts must arise between the practitioner/client interest and the public interest. On these occasions, the profession has no choice, by definition, but to choose the public interest over the private interest – but to do so in a way which gives maximum personal support to its membership. It seems a sine qua non that membership of any profession means recognising that one will be in conflict with one’s profession from time to time – and to accept that conflict.

Such matters seem essential to any profession and must be understood by the membership. So, for illustration, it seems to us to be essential that all members of the profession understand that: serving investor interest; advising companies which are expanding into developing countries; producing largely meaningless attestations to social or environmental
reports; or supporting corporate interest in debates on either the regulation of disclosure or the ability of companies to be sustainable \textit{may not be in the public interest}. At a minimum, each member of the profession must be appropriately educated to come to a reasoned view on this. If then there is conflict between the practitioner and the profession over such matters, the terms of the disagreement are, at least, clear.

The following extract from an international plc’s Annual Report illustrates the kind of state of mind that we believe may be at the root of the problem:

\textit{The depressed world economy has hurt many of [X]’s businesses despite the diversification of the Company. It was particularly sad that during a difficult year the agricultural division, such a constant contributor to profits, met with the worst drought in living memory in Southern and Central Africa. The sugar division, however, was able to make record profits.} [X plc, Chief Executive’s Statement, p5 Annual Report and Accounts, 1992]

That the “worst drought in living memory” caused untold suffering and deaths is of negligible significance in the light of the reduced profits. We realise, of course, that matters are never as simple as one would wish them to be, but it is the fact that the company (a client), the accountants and auditors would, apparently, find a statement like this unexceptionable that concerns us. If we are concerned with the public interest, X’s profits are the least of the important consequences of the drought.

More generally, accounting, as the language of business, is clearly a limited language to the extent that it ignores environmental (and social) externalities. Language fundamentally determines how issues are represented, understood and responded to. To the increasing extent that accounting as a language creates such a partial view of the world it encourages partial representation, understanding and response. At the very least, the accounting profession needs to develop a greater consciousness of this deficiency as it is fundamental to the work of those who purport to prudently measure the results of human activity.

Members of the profession are simply not going to be equipped in this
way if they have no *education* – as opposed to training – in accounting. Most UK accountants do not have such education. *A priori*, therefore, most UK accountants cannot know – in their capacity as accountants - what on earth we are talking about or why such issues are so crucial to their – our – profession.

Having said that, it appears to be equally true that accounting degrees are failing to produce individuals who understand such issues and can recognise the crucial nature of such matters. In short, the profession needs to be dominated by relevant graduates – but *not* the relevant graduates it currently produces. Back to the drawing board?

When we try to consider education, training and environmental issues – as we have sought to do in this report – we find ourselves in a vicious circle that reflects the issues just discussed above. Consider:

- accounting must serve the public interest; sustainability is in the public interest; accounting must serve sustainability;
- sustainability may mean a fundamental questioning of accounting practice; sustainability may mean the cessation of clients’ activities; sustainability may not be in the short-term financial interests of investors;
- Ergo, the accounting profession must question how it makes its living; this is not acceptable to practitioners – of course; is it acceptable to the profession? It must be, otherwise accounting cannot serve sustainability and thus the public interest and is, thus, not a profession.

In essence, the problem, it seems to us, is one of “bigger pictures” *versus* “getting a job done” – wood and trees, alligators and swamps.³ Practitioners need to get the job done, but to do so in the basic knowledge of what job it is they are doing.

The same applies – even more strongly - to accounting teachers.

It is our view and experience (we can offer little hard evidence for this) that a greater awareness and knowledge of accounting theory, environmental issues and sustainability leads *inexorably* – no exaggeration here – *inexorably* to a realisation that sustainability means no more and
no less than the continuation of life on the planet and that accounting is currently working against that aim. That is, regardless of your politics or social views, the facts of the matter are that accounting is working directly against the public interest – where the public interest is in the continuation of planetary and species well being. In this context, the next accounting standard or the extra earnings for this quarter are matters of stunning irrelevance. They have to be completed, the job has to be done – they must, however, be understood in context. That is all that this is about – context.

It is in this context that it is necessary to prioritise environmental issues. Environmental issues, like issues of social justice and responsibility are not entirely divorced from - but are qualitatively different from - issues like fraud, examination pass rates, accounting standards and activity based costing. The latter are not, in any obvious and direct way, central to the continuation of humanity and to the quality of life on this planet. The former are.

To see this, it is probably necessary to have an education which is equally balanced between the “big pictures” – public interest, sustainability, the nature of accounting – and the technical, directly “useful” matters of costing, taxation methods and disclosure.

But to get this balance right depends on a profession educated in both big and small pictures. This ought to be the job of the universities but, and this is a point that The Toyne Report overlooked, who is going to educate the educators? In a sense we are faced with a vicious circle and we need to find a way of breaking into it – it cannot be beyond our wit to make a virtuous circle of these issues.

Initial conclusions and recommendations

Our conclusion from this research is that the environmental issues that accountants need to know about can be thought of as comprising three levels of knowledge. These range from the immediate, short-term and ‘practical’ (the “immediate” issues), through the innovative and client-supporting issues which take a medium-term perspective (the “client-serving” issues – which are dealt with in more detail in the
Addendum to this chapter), to the longer term, more radical, sustainability issues, (the “sustainability” issues). The first two are “marginal” issues whilst the last is “structural” (in Bergstrom’s (1993) terms).

Immediate issues

As we reviewed in chapters six and seven, the UK professional bodies are beginning to integrate environmental (as well as social and ethical) issues into the professional syllabi. It is our perception that this integration covers, broadly, two elements: discussion designed to raise the basic awareness of accountants that environmental issues may be of importance; and specific matters of immediate concern to practice. This seems a promising and sensible first step. Amongst other things, auditors do need to be aware of potential environmental risks, financial accountants must be conscious of environmental liabilities, taxation advice needs to be increasingly aware of environmental taxation developments and management accountants are slowly recognising new areas of costs that need to be recorded and reported. (See Gray and Bebbington, forthcoming, for an introduction to these issues. There is now a considerable useable literature that provides guidance on these immediate concerns.)

As the professional syllabi are seriously over loaded, any consideration of new material – such as environmental issues – must be seen in context. An important element of that context is the growing recognition that students simply cannot learn everything that there is to learn and so we are seeing subtle but important changes in how the professional accounting examinations are being structured and taught. It seems impossible that in this process a major addition of new material on the environment could be achieved – or that it would be desirable. Through our discussions with practitioners and members of the professional bodies we have come to recognise that the professional examinations are vocational and must be competence and job related. This development process that is now under way is one to encourage. We have little to add at this level.

However – and it is a major “however” – if that is all that accountants
receive in the way of education and training, we believe that we have a major problem on our hands if we are to retain any credible claims to being a profession. We deal with this question later in this chapter.

Client-serving issues

There are a range of areas in which accountants are not delivering the sorts of support that one might have expected from them. We have reviewed in earlier chapters some of the anxieties about the lack of innovation from accountants – on environmental as well as other issues. It is our conclusion that there needs to be a substantial vocational – although non-radical, managerialist – element in accountants’ education and training that deals with client-supporting issues and which seeks to encourage a more pro-active, innovative frame of mind in accountants. It is difficult to know how this can be achieved as it is still unclear why these deficiencies arise in the first place. However, it seems likely that the “learn and churn” uncritical training that has typified accounting is in part to blame. Some of the more recent developments in professional education may help here but are unlikely to solve the whole problem. There is, it would appear something central to the ways in which accounting is perceived, constructed, practised and taught that encourages a conservative and rule-following mentality. Some educational means must be found to overcome this problem (see later).

More specifically, we have tried to suggest some of the questions that accountants must be able to deal with. These suggestions are contained in Figure 8.3 – and are further developed in the Addendum to this chapter.
Figure 8.3: *Some suggestions on client-serving environmental matters that accountants must cover in their training*

- What environmental risks may a client company face and how should the auditor ascertain them?
- In what way are environmental (contingent) liabilities different from other non-environmental (contingent) liabilities?
- Do environmental issues influence the true and fair view of financial statements?
- How should an investment appraisal decision incorporate environmental, health and safety considerations?
- What is environmental management and what implications does it have for accounting?
- How might the management accountant usefully update the chart of accounts to reflect environmental issues? What value would the organisation gain from this process?
- Environmental and social responsibility issues are important strategic concerns for any organisation. Outline what is meant by this and to what extent, if at all, this is any concern of accountants.
- How does accounting serve the public interest?
- What does company law have to say on the subject of maximising shareholder value?
- Why do the accrual and prudence principles produce conflicts? How can they be resolved?
- Is the Conceptual Framework a conceptual framework?
- How would you determine if your client/employer was a sustainable organisation?
- What principles would you adopt when faced with attesting to an environmental or social report?
- Outline the business case for the adoption of environmental and/or social reporting.

The list in Figure 8.3 is by no means complete (see *Addendum* to the chapter) and, indeed, some of the issues there may more comfortably fit into the “sustainability” issues below. These three categories of recommendations are not discrete categories.
Sustainability issues

Finally – and as will be quite apparent from the earlier sections of this report – we see it as absolutely essential that all accountants have a good, deep, well-informed understanding on key issues. The most obvious of these are:

- accounting and the public interest;
- accounting theory and the nature of accounting;
- what is meant by sustainability (including social justice issues) and its implications for business and accounting;
- the tensions between accounting education and training and the purposes of each.

It seems highly doubtful to us that these matters - and, indeed, those we discussed under client-serving issues - could be easily and successfully dealt with in professional training. Not only is the professional syllabus overloaded already, but (more appositely) these are not issues which lend themselves to an intense professional examination training approach. That is, the intensive inculcation of students that is required to help them pass difficult and stressful examinations does not encourage the more reflective and thoughtful approach that complex theoretical matters demand. Simply adding riders to questions (for example – and at the risk of seeming to trivialise the process - “... public interest means five points – 1,2,3, learn these for next week.” “Sustainability is defined as ... and has the following four characteristics ... 1,2,3,4, ... Make sure you get them into your answer on strategy because the examiner will be giving marks for them”) does not necessarily lead to the deeper learning that such matters require. Alternatively, a full integration of such complex matters throughout the syllabi may well risk further overloading of those syllabi.

How then can this range of educational needs – on the environment as much as on other broader issues – be delivered?
Delivery of education and training

If, as we have concluded, all accountants need some educational input and that this cannot be provided in the professional examination process, some additional educational mechanism needs to be found. In the work for this project we came across only four suggestions along these lines:

- post-qualification diploma;
- continuing professional education/development (CPE or CPD);
- full-time postgraduate, pre-training diploma in accounting;
- relevant or partially relevant undergraduate degree.

Each suggestion has its own strengths and weaknesses. The CPE/D suggestion is probably the least apposite as it is not designed to encourage a longer-term reflection in participants and it already fulfills an important function as a mechanism for updating accountants in new areas of (typically) technical expertise and does this job well. (To interfere with this process may well be inadvisable.) The other three all, typically, have a significant full-time educational element to them and are therefore, in our view, the more appropriate mechanisms to consider.

The post-qualification diploma has two analogues: the MBA route; and the full-time secondment that the UK armed forces use for their officers. We see difficulties with both. The MBA route tends to be almost exclusively career orientated and, as we have seen, that is part of the problem with accounting undergraduates at the moment. Furthermore, as the HE21 project found (see Chapter 3) MBA students seemed at least as resistant to environmental issues as accounting undergraduates. The armed-forces-style diploma would be attractive if it did not suggest a career break at a time when most accountants are building their careers and are at their most ambitious. Furthermore, the armed forces can operate such a scheme because their employees tend to be committed, long term, to the force. Accountants are generally less loyalty oriented and more interested in job mobility.

Our view is that only the last two suggestions have any real merit.
in inculcating the reflective, thoughtful approach that the difficult innovative and longer-term issues require. We will briefly return to the relevant degree later. The postgraduate diploma for non-accounting graduates – to be distinguished from the non-graduate foundation course and the postgraduate graduate conversion courses – has been operated with success elsewhere (notably in Ireland). Such courses still struggle with the tension between the vocational and transcendence issues but as full-time courses for non-accounting graduates they have the capability of providing an opportunity to carefully examine some of the fundamental questions that (amongst other things) environmental issues and sustainability raise. We recognise that such courses may not be popular and/or will impose greater costs on non-accounting graduates but believe that the issues at stake are too important to let such concerns over-ride professional issues. We believe that the accounting profession could usefully re-examine this possibility.

Re-examining the relevant degree

If we had any doubts about the crucial potential of relevant degrees to the future of the accounting profession when we embarked upon this project, the experience in the project dispelled them. But this is about the potential of the relevant degree. Three of our respondents expressed these issues well (and we make no apologies that some of these quotations are repeated from earlier in the report):

The job of the universities is one thing, the job of training for the profession is another. But you observe universities becoming more pseudo professional in their degrees ... 

... people who come here with accounting degrees are not usually as good as people with non-accounting degrees ... 

... the students that we have the most difficulty with in thinking independently are students who have come from universities [with] solid accounting degrees ...
I’d rather accountancy was done at the universities than [in training]. I’d like to see the accountancy degree being not so definitive in the accreditation ... the accountancy degree was perhaps found to be narrower than it really should have been.

... [accreditation] ... accounts for a [maximum] of two-thirds of a three year degree. ... most students in Scotland are now doing a four year degree ... so the universities have fifty percent of the material and it is absolutely up to the universities what they do. And I can only see that increasing ...

We understood from the conversations of which these quotations are a part, that there is a problem with accounting degrees. As we saw in chapters four and five, this is a widespread view. If there is one key to this whole area it must be, in our view, an increase in the use of relevant graduates but with a major change in how relevant degrees are taught. There is still a fundamental question mark hanging over accounting degrees – why do accounting teachers teach what they do when they not only do not need to do so but probably should not being doing so at all? Until this problem is resolved, the problems that the profession has (and to a lesser extent practitioners have) with accounting graduates will remain. We found ourselves, for the first time in our academic careers having some sympathy for (particularly) the ICAEW’s position on accounting degrees.

How can the vicious circles be broken? We conclude, albeit tentatively, that the major implication of our report for the professional bodies lies here. At the risk of incurring cries of political naivete, we make suggestions as to how the vicious circle might be broken in the final section.

Leadership from the professional bodies

Change clearly needs to come about in accounting education and training. There are widespread anxieties about both accounting graduates and the lack of flexibility and innovation amongst practicing accountants.
These anxieties are cast into sharp relief when we seek to incorporate environmental issues and sustainability into the accountants’ universe. If something is going to change, we believe it can only come from the professional bodies: we have seen that academics are both caught by inertia and reluctance to address environmental issues in any substantial way; students are predominantly career orientated and practitioners are predominantly client orientated. Whether rightly or wrongly, that only leaves the professional bodies to grasp the nettle.

History might tell us that we have selected unlikely champions, but there are few other candidates and the professional bodies have provided leadership in the past, (most obviously the significant leadership on environmental issues - and, more recently, social issues - given by ACCA, CICA and NIvRA).

Having come this far, we might as well go all the way. We believe that the professional accountancy bodies must:

• examine, develop and publish a detailed and careful examination of how they do (and intend to) serve the public interest;
• draw up guidelines for how members of the profession can begin to recognise that there is a difference between their roles as an accountancy practitioner and their role as a member of the professional body to which they belong. These guidelines could explain how members can begin to learn how to recognise and deal with these differences;
• identify, develop and publish guidance on the forms of conflict that will inevitably result from tensions between client and public interest;
• deduce from here, guidelines on how the profession and practitioners must deal with these inevitable conflicts;
• clarify the difference and the links between education and training;
• develop and publish a firm statement on why environmental (and social and ethical) issues are substantively different from other – more
typically accounting – issues and explain, carefully, what that could mean for the profession;

• make a firm commitment to opening up an informed and reasoned debate on what sustainability means for the profession;

• urge universities to cease aping the professional training process and consider refusing accreditation to degrees which slavishly adhere to the professional syllabi;\(^5\)

• instruct universities in the key matters they expect in accounting graduates and, in particular, that they expect accounting graduates to have a detailed and informed understanding of public interest, accounting theory and sustainability and to be fully aware of the differing purposes of education and training;

• provide detailed guidelines to practitioners and recruiters that to expect undergraduates to be job-prepared at the end of their degrees is not only unrealistic but is unfair on the student and unhealthy for the profession;

• actively encourage the firms to recruit more relevant graduates;

• actively encourage the firms to become more involved with University departments that teach accounting degrees;

• require members who recruit non-relevant graduates to explain how they will educate their recruits;

• consider the adoption of a one-year full time postgraduate diploma in accounting theory and education for all non-relevant graduates as a pre-requisite for entry to training contracts.

Conclusions

A major axiom that has underpinned this report is that there is something intrinsically important: in accounting; in what it is to be an accountant; and in the aspirations associated with being a professional. Such an axiom must seem idealistic, even naive and reactionary, in the present climate. The universities are under increasing pressures to move from classical ideals of education towards a cheaper, ‘mass-produced’ product; university accounting departments are facing the possibility
of reduced applications from students; there is increasing speculation about the demise of accounting as an identifiable specialism and the professional bodies are finding that their roles are in danger of being usurped by the big international firms.\textsuperscript{6} We, as accountants, can accept this as a pragmatic inevitability or we can take, what might well be, our last opportunity to really re-examine the foundations of our subject and our profession. On such matters as education, standard setting and defining the public interest that we serve, we do not have an especially admirable history – nor a history which would suggest that we can take this sort of moral and intellectually analytical stance. We need to take such a stance or else give way to pragmatic inevitability and admit that we were never a profession in the first place. It is our contention that this would be little short of a tragedy.

Environmental issues – and the increasingly crucial matters of sustainability and social responsibility - bring these matters into sharper focus. This report has sought to collate evidence and develop argument in a manner that will encourage the sort of debate we believe is essential if the profession is to fulfill its duties and if environmental and social issues are not to be left in the (not entirely reliable) hands of ‘big business’. Our recommendations, including the detail in the \textit{Addendum} to this chapter, are designed to encourage this debate and to provide some of the means for a more questioning and more informed debate around our future. Environmental issues cannot, we maintain, be satisfactorily accommodated within the current orthodoxy of accounting and business practice – the conclusion to be drawn therefore is that, rather than there being something wrong with the environment, there is something wrong with the orthodoxy. It is this that we hope will be the subject of careful debate in the coming years.
Addendum to Chapter Eight

Developing the intermediate recommendations

Figure 8.3 provided some specimen issues – in the form of questions – that we considered were essential to the profession’s intermediate development of a more educative approach to (amongst others) environmental and social issues. This Addendum is an attempt to take that a little further and suggest one set of approaches to integrating these more complex and demanding matters within both professional and university education/training.

We remain convinced that any significant progress in these areas will depend upon a major lead by the professional bodies themselves and that such a lead needs, amongst other things, to provide the kind of guidance that will lead towards an education of the educators and trainers in line with The Toyne Report.

Until such time as the whole profession has a shared language and knowledge on the requisite conceptual and information requirements that we are suggesting here, any intermediate recommendations must proceed on the basis of only partial knowledge on the part of the educators and trainers.

For university-based courses, the model we have in mind is that which obtained (and still obtains to a degree) in matters related to IT and IS. That is, specialist courses taught by enthusiasts generate awareness of the issues, explore methods of teaching and create teaching materials. As the issue matures, there is a roll-out process from the specialist courses into the mainstream until such time as the issues are as fully integrated into the degree as seems possible or reasonable. Specialist courses remain, but now build on the basic knowledge acquired in the mainstream. In the universities, we believe that we are at the point where this roll out has started and are now seeking to encourage it.
The situation on the professional courses is more complex – and not just because of their diversity and fairly rapid rate of change. Basically, there is no provision for a specialist course at the moment – although the creation of specialisms and faculties suggest that such a possibility might exist for the institute brave enough to take the first step. Our suggestions here are predicated on the assumption that such a faculty is unlikely in the near future and so try to suggest rather simple means by which key issues might be introduced into the current pattern of syllabi (as broadly understood).

The next few pages offer tables in which the broad (and traditional) functional areas of accounting are briefly considered, specimen issues/questions within each area are raised and some discussion of how they might be employed within existing teaching is provided. Some suggestions as to the sorts of extant material which could be employed to support the teaching are also suggested. Interested readers are recommended to consult two key journals: Social and Environmental Accounting Journal (published by CSEAR); and Environmental Accounting and Auditing Reporter (edited by Roger Adams of ACCA). In addition, the Centre for Social and Environmental Accounting Research produces guided reading lists and has a specialist library which is available for consultation by members.

(See www.gla.ac.uk/departments/accounting/csear)
Specimen environmental/social/public interest issues within accounting education and training

**GENERAL/CONTEXT**
*(eg. Business environment/accounting theory/case study)*

<table>
<thead>
<tr>
<th>Specimen questions</th>
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</thead>
<tbody>
<tr>
<td>• How does accounting serve the public interest?</td>
</tr>
<tr>
<td>• How do conflicts between the public interest and the interests of clients arise in the case of environmental and social matters? How are they resolved?</td>
</tr>
<tr>
<td>• What is meant by sustainability? What are its implications (if any) for accounting, financial markets and the business sector?</td>
</tr>
<tr>
<td>• What does company law have to say on the subject of accounting’s purpose being to help organisations maximise shareholder wealth?</td>
</tr>
<tr>
<td>• Do companies really create wealth? Support your answer with evidence.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>How and where dealt with?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professional courses</strong>: Probably best considered as an essential part of accredited degrees and/or in the introductory material of foundation and graduate conversion plus integration into any final examination/cross-disciplinary case study;</td>
</tr>
<tr>
<td><strong>Degree courses</strong>: Introductory business environment courses, compulsory courses which consider accounting theory; cross-subject integrating courses (eg. via dissertations or case studies) and the more reflective option courses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specimen teaching materials</th>
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</thead>
</table>
Specimen environmental/social/public interest issues within accounting education and training

### AUDITING

<table>
<thead>
<tr>
<th>Specimen questions</th>
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</thead>
<tbody>
<tr>
<td>• What environmental risks may a client company face and how should the auditor ascertain them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Do environmental issues influence the true and fair view of financial statements?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What principles would you adopt if asked to provide an attestation on an environmental or social report?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A client has attempted to produce a ‘triple bottom line’ Annual Report containing both environmental and social information. What are the implications for your audit of the financial statements?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• You have been asked to audit your client’s ‘sustainability report’. What steps would you take, paying particular attention to the evidence you would seek?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• In what circumstances might environmental issues present a ‘going concern’ issue for a client company?</td>
<td></td>
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</table>

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<thead>
<tr>
<th>How and where dealt with?</th>
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<tbody>
<tr>
<td>• Professional and degree courses: in mainstream auditing courses. Where the opportunity exists these matters can be dealt with in some detail as separate topics but integration with a principles-based approach to auditing - eg. on risk, evidence, independence, communication - should be able to cover such matters as essentially little more than variations on a theme.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Specimen teaching materials</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• APB, ASB and FEE publications.</td>
<td></td>
<td></td>
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<tr>
<td>• Kamp-Roelands N (1999), <em>Audits of environmental reports: are we witnessing the emergence of another expectations gap?</em> Royal Nivra, Amsterdam.</td>
<td></td>
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</tr>
</tbody>
</table>
Specimen environmental/social/public interest issues within accounting education and training

<table>
<thead>
<tr>
<th>Specimen questions</th>
<th>Professional courses: The less technical issues that arise here could be essential elements of accreditation and/or introductory/foundation training. It seems to us that such matters could only be dealt with as technical issues where there is already (or forthcoming) ASB, APB or equivalent statements. Otherwise, it may only be possible that questions such as these are raised within courses, signalled as of some (relatively minor) interest to the examiner and appear from time to time as a rider in the appropriate examinations. Degree courses: The argument would be that such questions were bread and butter on university courses in: introductory accounting; financial reporting; and any compulsory accounting theory coverage.</th>
</tr>
</thead>
</table>
| Specimen teaching materials | • ASB and FEE pronouncements.  
• Sangster A (1997), Frank Wood’s Business Accounting, 7th Edition contains a chapter on social accounting.  
Specimen environmental/social/public interest issues within accounting education and training

<table>
<thead>
<tr>
<th>MANAGEMENT ACCOUNTING</th>
</tr>
</thead>
</table>
| **Specimen questions** | • How should an investment appraisal decision incorporate environmental, health and safety considerations?  
• How might the management accountant usefully update the chart of accounts to reflect environmental issues? What value would the organisation gain from this process?  
• How would you determine if your client/employer was a sustainable organisation (under the Brundtland definition) or not?  
• What are ‘win-win’ situations with respect to the environment and how can the management accountant help discover them?  
• The environmental manager has asked for your help with the company’s life cycle assessment and eco-balance. What is meant by these terms and what input are you likely to be able to offer?  
• ‘An environmental management system that does not integrate with the existing management and cost accounting system is doomed to failure’. Discuss. |
| **How and where dealt with?** | **Professional courses**: While such issues can be usefully woven into the fabric of cross-subject and/or case study work, the pressure and tempo of professional teaching might be better able to cope with the more procedural matters (eg. investment appraisal) by simply raising questions of this sort within existing teaching - if only for variety and illustration.  
**Degree courses**: In addition to specific sessions dealing with questions of this sort, all management and costing courses can usefully integrate these types of issues in a straightforward manner. The material in this area is probably the best developed and the least disruptive of all the environmental functional areas. |
Specimen environmental/social/public interest issues within accounting education and training

Specimen environmental/social/public interest issues within accounting education and training

<table>
<thead>
<tr>
<th>Specimen questions</th>
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</thead>
<tbody>
<tr>
<td>What is meant by ethical investment? To what extent, if at all, does investing ethically penalise the investor and/or penalise society?</td>
</tr>
<tr>
<td>To what extent, if at all, do financial markets recognise and reward environmental management initiatives? Support your answer with evidence.</td>
</tr>
<tr>
<td>What environmental issues (if any) should your client/employer consider before making a hostile takeover bid?</td>
</tr>
<tr>
<td>Discuss the proposition that the only social responsibility of the company is to make as much money for the shareholders as possible.</td>
</tr>
<tr>
<td>Examine the extent to which environmental and social disclosures are influential in investor buy/hold/sell decisions;</td>
</tr>
<tr>
<td>To what extent do social and environmental responsibility issues affect the risk of an organisation?</td>
</tr>
<tr>
<td>Discuss the extent to which investment in the markets of ‘emerging economies’ is financially advisable but ethically debatable.</td>
</tr>
<tr>
<td>What is ‘fair trade’? Explain SA8000.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How and where dealt with?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional courses: The more theoretical problems might, again, be raised as accreditation issues. The more technical matters (eg. environmental risks in mergers and acquisitions) should be built directly into those areas. An essential role for the teacher is to raise, in the class, the very notion that financial issues are moral issues and have important effects other than the directly economic.</td>
</tr>
<tr>
<td>Degree courses: Increasingly, mainstream finance courses are raising ethical issues, recognising ethical investment and reporting the evidence on the impact social and environmental responsibility on financial performance. These early stages can be developed to lead to a more questioning (and currently heretical) approach to finance learning.</td>
</tr>
</tbody>
</table>
Specimen environmental/social/public interest issues within accounting education and training

<table>
<thead>
<tr>
<th>Specimen teaching materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Leggett J (ed) (1996), <em>Climate change and the financial sector</em>, Gerling Akademie Verlag, Munich.</td>
</tr>
<tr>
<td>• Davidson A (1998), ‘Can green and good be gold?’<em>, Green Futures</em>, Jan/Feb, pp31-32.</td>
</tr>
<tr>
<td>• ...and special issues or magazines <em>Tomorrow</em> (July/Aug 1999) and <em>Ethical Consumer</em> (Issue 60, Aug/Sept 1999).</td>
</tr>
</tbody>
</table>
Specimen environmental/social/public interest issues within accounting education and training

### Management and Strategy

#### Specimen Questions
- Environmental and social responsibility issues are important strategic concerns for any organisation. Outline what is meant by this and to what extent, if at all, it is of any concern to accountants.
- Outline the business case for the adoption of environmental and social reporting.
- How would you determine if your client/employer was a sustainable organisation (under the Brundtland definition)?
- What is stakeholder dialogue and why is it important to the organisation? Does it have any connection with accountability?
- Compare and contrast ISO14001 and EMAS. Which should your client/employer adopt? Why?
- What is the Global Reporting Initiative? What are the strategic benefits and detriments to the organisation of involvement with that initiative?
- Explain how you would integrate environmental performance into the reward and incentive scheme for managers. Explain your choice and illustrate your answer with examples.

#### How and where dealt with?
**Professional and Degree Courses**: Both need to learn from the HE21 experience (in Chapter 3). Both will experience the same issues but should, in principle, find little difficulty in feeding issues such as these into the core of the teaching.

#### Specimen Teaching Materials
Specimen environmental/social/public interest issues within accounting education and training

<table>
<thead>
<tr>
<th>Specimen questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• What is a carbon tax? What are the different ways in which it can be applied and what are the strengths and weaknesses of each approach?</td>
</tr>
<tr>
<td>• Explain the workings of the climate change levy. What are the likely implications for society and for business?</td>
</tr>
<tr>
<td>• Prepare a briefing paper for the board on tradeable pollution licences outlining the opportunities and threats that they offer the commercial organisation.</td>
</tr>
<tr>
<td>• What are the principal fiscal options available to governments wishing to bring costs and prices more in line with the principles of sustainability?</td>
</tr>
<tr>
<td>• Are market instruments more efficient than regulation in the battle against un-sustainability? Why? Why not?</td>
</tr>
<tr>
<td>• How has the landfill tax affected the organisation’s investment appraisal decisions?</td>
</tr>
<tr>
<td>• Outline an ethical case for and/or against the argument that minimising the tax bill of a client/employee transfers a relatively minor private benefit into a major social cost</td>
</tr>
<tr>
<td>• Discuss the proposition that the payment of tax is a privilege.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How and where dealt with?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professional Courses</strong>: Existing taxation training recognises newer taxes associated with environmental issues. These are likely to increase so sensitivity to their likely impact can be introduced to mainstream courses. More difficult, but no less important, is recognition of the moral and social issues associated with a taxation regime. The professional bodies vary in their expectations on this. There is a case for bringing all up to the level of the best in this area.</td>
</tr>
</tbody>
</table>

| Degree courses: University courses should not ape the professional syllabi should look at both policy and practice. In doing so, major segments of the course can be devoted to the social, environmental and ethical issues of taxation. |

<table>
<thead>
<tr>
<th>Specimen teaching materials</th>
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</thead>
<tbody>
<tr>
<td>• …and the journal <em>Environmental Taxation and Accounting</em>.</td>
</tr>
</tbody>
</table>
Endnotes:

1 This *Addendum* is offered in the interests of practicability following the excellent suggestions made by ICAS on an earlier draft of this report. Whilst it would have made for a more ‘comfortable read’ to have incorporated this detail into the chapter proper, we could see no way of doing this without disrupting the flow of the chapter altogether.

2 If serving the public interest is not a central tenet of accountancy then, in addition to arguably renouncing its claims to being a profession, the *a priori* requirement to examine accounting, professional standards and the environment is less pressing, perhaps even non existent.

3 In the interests of clarity we point out that this is a reference to the aphorism that when you are up to your armpits in alligators it is difficult to remember that you are supposed to be draining the swamp.

4 We also briefly raise the possibility of environmental and social accounting, auditing and reporting operating as a special faculty of one or more of the institutes in the *Addendum* to this chapter.

5 It is worth recalling that, in the UK, the Quality Assurance Agency has undertaken a series of benchmarking studies for different subjects. The statement for accounting, issued in 2000, gives equal emphasis to technical and conceptual issues. It is too early, at the time of writing, to see what effect this might have on accounting degree teaching.

6 At the time of writing there is much speculation about Big 5 moves towards taking a lead in standard setting and in qualifications. There is a sad parallel between the relationship of the multi-national Big 5 with the professional bodies and the large multi-national corporations with nation states.

7 We have argued elsewhere that the development of environmental and social accounting, reporting and auditing has suffered from a lack of specialised accounting support. The work of organisations such as the Institute of Environmental Management and Assessment and the Institute of Social and Ethical Accountability are demonstrating that there is a demand for such specialisation. It is an area we believe that the leading professional accountancy bodies should consider most seriously.
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Accounting Education Change Commission (1990), Objectives of Education for Accountants, (Position Statement Number 1), AECC, Bainbridge Island.
Amernic J H (1996), ‘The rhetoric versus the reality, or is the reality ‘mere’ rhetoric?’ Critical Perspectives on Accounting, 7(1/2), Feb/April pp57-75.


Bennett M and P James with L Klinkers (eds), (1999), Sustainable Futures: Evaluation and Reporting of Environmental and Social Performance, Greenleaf, Sheffield.


Chambers R J (1948), ‘The training of accountants’ The Australian Accountant, 18(a).


Coe T L and B D Merino (eds), (1986), *Future of Accounting Education* North Texas State University, Grant Thornton Conference.


Ditz D, J Ranganathan and R D Banks (1995), *Green Ledgers: Case studies in environmental accounting* World Resources Institute, Baltimore MD.


Evers S M (1993), *The manager as professional*, Institute of Management, Corby, Northants.


Finlayson A (1999), ‘Culture’ Chapter 7 in Ashe et al, *op. cit*.


French P A, R E Jensen and K R Robertson (1992), ‘Undergraduate student research programs: Are they as viable for accounting as they are in science and humanities?’ *Critical Perspectives on Accounting*, 3(4), December, pp337-357.


Grey C (1998), ‘On being a professional in a “Big Six” Firm’ *Accounting, Organisations and Society*, 23(5/6), pp569-587.


Keown K C (1948), ‘Let’s look at our educational policies’ *The Australian Accountant*, 18(3).


Sterling S (1996), ‘Education in change’ in Huckle J and S Sterling (eds), *op. cit*.


Zeff S A (1996), ‘It’s all right for real people to have theories too’ 
Zimmerman M E (1994), Contesting Earth’s Future: Radical ecology and 
postmodernity, University of California Press, London.
The following research instruments are attached here as an Appendix:

- *Instrument A*: Interview checklist employed with members of the profession, the professional bodies and other “opinion formers”;
- *Instrument B*: Questionnaire sent to accounting educators to elicit their views on the teaching of social and environmental accounting in UK universities;
- *Instrument C*: Questionnaire to undergraduate students at three universities to elicit their views on their reasons for choice of options;
- *Instrument D*: Interview template for interviews with recruiters;
- *Instrument E*: Questionnaire sent to accountancy recruitment offices.

The instruments reproduced here are not exact replicas of the instruments employed as they have been reset in order to fit an A5 page and to fit the editorial requirements for this report.

**Instrument A: Interview checklist employed with members of the profession, the professional bodies and other ‘opinion formers’**

1. Should environmental issues be explicitly discussed as part of accountants’ training? If ‘Yes’ why should they be discussed? What sorts of environmental issues should be discussed? How important is it that they are discussed?
2. Should environmental issues be explicitly discussed as part of auditors’ training? If ‘Yes’ why should they be discussed? What sorts of environmental issues should be discussed? How important is it that they are discussed?

3. Environmental issues are explicitly considered in FRED 14 “Provisions and Contingencies” and in the working paper “Discounting in Financial Reporting”. Would environmental issues be adequately considered if their coverage was restricted to what appears in existing or proposed GAAP?

4. Would a Companies Act requirement for an environmental report (as exists in Denmark) be desirable and should such a thing influence accountant and their training?

5. It can be argued that conventional growth oriented economic activity is incompatible with a finite eco-system: should such concerns be covered in accounting education/training? If yes: should this be covered as part of the professional examinations? or elsewhere?

6. To what extent does your answer to the previous questions suggest a greater role for university education – either in the form of a relevant accounting degree or, perhaps, as part of a graduate conversion course?

7. What changes would you like to see in accountants training? How should they occur?
Instrument B: Questionnaire sent to accounting educators to elicit their views on the teaching of social and environmental accounting in UK universities

Social and environmental accounting questionnaire

The following two sections are concerned with establishing: (a) if social and/or environmental accounting is taught on undergraduate degrees in your department, and if so, (b) a broad indication of the way(s) in which it is taught.

SECTION A

A1. In your department is social and/or environmental accounting ... 
(a) offered as a separate course/module 
(b) in the process of being developed as a separate course/module 
(c) offered as a component of other courses/modules, (eg financial accounting) 
(d) not planned to be offered?

Please indicate by ticking the appropriate response(s) [Yes/No boxes offered]

If you answered ‘YES’ in 1(a) or 1(b) or 1(c), what is the title of the module?

……………………………………………………………………….

If you have answered ‘yes’ to question 1(d) above please go to section B. If you have answered ‘yes’ to any other question please complete section A.

A2. Is this social and/or environmental accounting teaching offered to:
(a) accounting specialists student only 
(b) non-accounting specialist students only 
(c) both accounting specialist and non-accounting specialist students 
Please indicate by ticking the appropriate response(s) [Yes/No boxes]

NOTE: If you answered ‘yes’ to 1(b) only, ie a course is under development, but not currently taught, you may not be in a position to answer all questions in section B. However it would be helpful if you could complete the section as far as you are able to. Thank you.
A3. If you answered ‘no’; to any parts of question 1 please circle a number to indicate the degree of relevance of each of the following statements as to why social and/or environmental accounting is not taught.

[5-point scale offered and labelled Very relevant (1), Some relevance (3), No relevance (5)]

- The subject matter is not thought to be a necessary part of accounting education
- Staff do not wish to teach the subject matter
- Staff do not feel sufficiently knowledgeable to teach the subject matter
- The technical and quantitative emphasis in accounting courses/modules tends to make the subject matter inappropriate
- The professional orientation of accounting courses/modules tends to make the subject matter inappropriate
- Opinion is divided on the positioning of the subject matter in accounting courses
- It is felt that other course(s)/module(s) deal adequately with the material and its rationale (please state course title(s))
- Other explanations: (please specify)

Now please go to SECTION C of the questionnaire. To enable us to develop a comprehensive survey of the teaching of social and/or environmental accounting issues, it is still important that you complete this section and return the questionnaire. Thank you.

SECTION B

B1. If you answered ‘yes’ to any part of question 1 (a), (b), or (c), please indicate on what course(s)/modules and in which year(s) social and/or environmental accounting material is taught and whether the course(s)/module(s) is (are) compulsory or optional for accounting specialists: [Box offered for completion]

- Separate social and/or environmental accounting course
- Financial accounting
- Management accounting
- Other(s): (please specify)
B2. On which of the following courses/modules, does the percentage of lectures devoted to social and environmental accounting issues comprise more than 10% of the total course lectures? (please circle)

<table>
<thead>
<tr>
<th>Type of Course</th>
<th>Year of Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial accounting</td>
<td>1  2  3  4 No</td>
</tr>
<tr>
<td>Management accounting</td>
<td>1  2  3  4 No</td>
</tr>
<tr>
<td>Other(s): (please specify)</td>
<td>1  2  3  4</td>
</tr>
</tbody>
</table>

The remaining questions in this section relate to separate courses/modules and to courses/modules where the percentage of lectures devoted to social and environmental accounting exceeds 10% of the total time on the course.

If there is more than one course devoting in excess of 10% of the lecture time to the subject, then please answer the following questions only with respect to the main course concerned (ie the course within which social and environmental accounting issues are given the greatest exposure.)

If no course is offered where the percentage of lectures devoted to social and environmental accounting exceeds 10% of the total lectures on the course please go to SECTION C of the questionnaire.

Course background

B3. Please state the title of the course(s)/module(s)

B4. Please indicate whether the course/module is optional or compulsory for accounting specialists

B5. Please indicate the length of the course/module

- One (10 week) term/(15 week) semester (if different please state number of weeks)
- Full year
- Other: (please specify)
- ..........................................................

B6. Please indicate the year of the degree in which the course/module is taught – first, second, third, fourth
B7. Is (are) there any prerequisite subjects specified for the course/module? Yes/No
If ‘yes’, please indicate the nature of the prerequisite subject(s)
1. introductory first year accounting course
2. second year financial accounting course
3. second year management accounting course
4. other(s) including non-accounting prerequisites (please specify)

B8. Please indicate the number of staff teaching on the course

B9. Please indicate the approximate percentage of course time devoted to
social and environmental accounting issues

\[
\begin{array}{ccc}
11-20\% & 21-30\% & 31-40\% \\
41-50\% & 51-60\% & 61-70\% \\
71-80\% & 81-90\% & 91-100\% \\
\end{array}
\]

B10. Please indicate approximately how many years social and environmental
accounting issues have either been taught as a separate course, or have formed
a significant component (more than 10%) of another course

B11. Where social and environmental accounting forms a significant part of
another course, please indicate if there have been any changes in the time
being devoted to the subject matter in recent (say within the past 5) years.
(Indicates percentage increase/decrease since introduction)

B12. Please allocate percentages to indicate the nature of the method of
assessment used for the course during the 1997/98 academic year. \textit{Method of
assessment}: examination, project/extended essay, other (please specify)

Student profile

Unless stated, the following questions relate to the most recent student intake
(\textit{ie} those attending the course/module during the 1997/98 academic year)

B13. Please indicate the approximate number of accounting students who are
taking the course during the 1997/98 academic year and the percentage of the
year’s accounting students that it represents:

B14. What is the gender distribution of students on the course during the
1997/88 academic year? Please state approximate percentages: Female/Male
B15. Please state the approximate percentage of students taking the course in 1997/98 that were accounting specialists

B16. Please indicate whether the students from any of the following disciplines formed a significant percentage (say, greater than 15%) of the students taking the course during 1997/98: Management studies; Sociology; Economics; Government & politics; Other(s): please specify

B17. Please indicate if the number of student(s) taking the course has changed since its introduction (or over the last 5 years, whichever is shorter): (indicate approx. number increase/decrease since introduction)

Course content

B18. Please indicate the degree of coverage given to the following issues when teaching social and environmental accounting material on the course:
[5-point scale offered labeled Significant coverage (1), Some coverage (3) and No coverage (5)]

- A theoretical framework for social and environmental accounting
- Social accountability
- Comparative international social reporting
- Environmental accounting
  - for management
  - for external reporting
- Social audit
- Financial social reporting
- Non-financial social reporting
- Social/ethical investment
- Consumerism
- Employee reporting
- Human asset accounting
- Accounting information and collective bargaining
- Accounting in not-for-profit organizations
- The political economy of accounting
- Critical accounting
- Sustainable development
- Others: (please specify)
B19. If applicable, please list up to three topics on the course which in the past three years have been given considerably greater attention (as a proportion of the course/module time) in relation to the teaching of social and environmental accounting issues:

B20. If applicable, please list up to three topics on the course which in the past three years have been given considerably less attention (as a proportion of the course/module time) in relation to the teaching of social and environmental accounting issues:

B21. Do you use a main text for the course? If ‘yes’ please provide the author(s) and title of the text:

B22. If applicable please provide the title(s) and author(s) of (any) other text(s) to which you require significant reference to be made by students on the course

B23. Is the course taught mainly through the use of articles? If ‘yes’ please provide the titles of the main journals used

B24. Please indicate the extent to which you require students to make reference to articles on social and environmental accounting in the following journals: [5-point scale offered labeled Always (1), Sometimes (3), Never (5)]

- Accountancy
- Accountancy Age
- Accounting and Business Research
- Accounting, Auditing and Accountability Journal
- Accounting Organisations & Society
- Accounting Review
- Advances in Public Interest Accounting
- British Accounting Review
- Critical Perspectives on Accounting
- Financial Accountability and Management
- Journal of Accounting and Public Policy
- Journal of Accounting Research
- Journal of Business Finance and Accounting
- The Accountants’ Magazine
- Newspaper Articles
- Others: Please specify
**Course aims**

**B25.** How appropriate are the following statements as descriptions of the reasons for covering social and environmental accounting issues in undergraduate accounting degree programs? [5-point scales offered labeled Very appropriate (1), Appropriate (3), Not appropriate (5)]

- To enhance students’ awareness of the social and environmental obligations of corporate behaviour
- To enhance students’ awareness of recent developments on critical accounting theory
- To explore the socially constructed nature of accounting practices
- To study the economic and social consequences of accounting
- To critique the nature of society and the dominant interest being served
- To illustrate the scope for applying accounting calculations in traditionally non-financial areas
- To highlight the limitations of neo-classical economics as an underpinning of the accounting craft
- To facilitate the development of improved ways of accounting in organizations
- To fill a gap in students’ accounting education
- To teach material that better reflects the political and social beliefs of academic accounting staff
- Others: (please specify)

**Course facilitators**

**B26.** Please indicate the extent to which you feel that the following factors have facilitated your teaching of social and environmental accounting issues. [5-point scale offered labeled Significant extent (1), Some extent (3), Not at all (5)]

- The increasing importance of environmental issues within both national and international political agendas
- A growing interest in, and concern with, environmental accounting issues by practising accountants
- The availability of general support and encouragement from accounting colleagues
- An acknowledgement that social and environmental accounting issues are a key part of the core accounting curriculum
A growing demand by students for coverage of issues they see as very relevant to their day-to-day lives

A greater consideration of social and environmental accounting issues in academic and professional accounting journals

The existence of staff in the department who are active researchers in the area of social and environmental accounting

Other factors: (please specify)

Course impediments

B27. Please indicate the extent to which you feel that the following factors have impeded your teaching of social and environmental accounting issues. [5-point scale offered, labeled Significant extent (1), Some extent (3), Not at all (5)]

Students not regarding such issues as a necessary element of accounting education

Students not perceiving such issues as relevant to future career paths

Students not perceiving such subject matter as politically acceptable

Students not being introduced to such material at an earlier stage in their studies

Colleagues not wishing to teach such material as they do not feel qualified to do so

Colleagues not wishing to teach such material as they do not regard it as a necessary element of accounting education

Colleagues regarding such subject matter as lacking in academic rigour

Other factors: (please specify)

SECTION C

Personal detail

C1. Please state your name, work address, present job title and gender, and indicate your age range.

C2. Please indicate how many years you have been in your present job, and how many years you have worked in higher education

C3. Please indicate if you are a member of any of the following professional bodies
Appendix

C4. Are you a graduate?

C5. Do you have a higher degree(s)?

C6. Please indicate the extent to which you studied social and environmental accounting issues in your own higher education.

C7.
(a) To what extent is your teaching of social and/or environmental accounting motivated by your personal values?
(b) To what extent is your research of social and/or environmental accounting motivated by your personal values?
(c) To what extent is your teaching of social and/or environmental accounting motivated by the criticisms of accounting education?
(d) Are you aware of any other reasons you teach and/or research social and environmental accounting?

C8.
(a) Please indicate the approximate extent to which you believe the time you spend on research activities is devoted to social accounting issues.
(b) Please indicate the approximate extent to which you believe the time you spend on research activities is devoted to environmental accounting issues.
(c) Please indicate the approximate extent to which you believe the time you spend on research activities is devoted to social and environmental accounting issues.

C9. Please indicate if you would like a copy of the results of this survey.

Thank you very much for your time and co-operation in completing this questionnaire.
Instrument C: Questionnaire to undergraduate students at three universities to elicit their views on their reasons for choice of options

Attached are two questionnaires - one for students who have chosen to study an environmental option in their degree (yellow questionnaire) and one for students who chose not to study an environmental option in their degree (the pink questionnaire). Would you please administer these questionnaires in class (perhaps as part of a natural short break in the middle of a lecture?) with the following instructions to the students:

1. If you are studying an environmental (and social) accounting option please complete the yellow questionnaire;
2. If you have chosen not to study an environmental (and social) accounting option please complete the pink questionnaire.
3. Please only complete one questionnaire.
4. Each questionnaire has two parts - please complete both as best as you can.
5. Completion should take about 6 to 7 minutes.
6. If there are any issues that you believe have been missed by the questionnaire - or further comments you wish to make, we would be very pleased to receive these. The back of each questionnaire is blank for this purpose.
7. The questionnaires are anonymous and the only marking on the questionnaires is to distinguish the institution and the programme on which you are studying.
8. If you are completing the non-environmental choice questionnaire (pink) it asks for why you chose the option(s) that you did. If in doubt as to which option your answers should relate, please select your weakest or last choice.

Thank you very much for your time
I CHOSE SOCIAL AND ENVIRONMENTAL ACCOUNTING AS AN OPTION
Reasons why I chose social and environmental accounting as an option
(Please circle all that apply)

<table>
<thead>
<tr>
<th>Possible reasons for choice: the social and environmental accounting (SEA) course...</th>
<th>Not a reason</th>
<th>Weak influence - Strong influence on my decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>- should be interesting</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- is different from other courses</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- is more qualitative than quantitative</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- is potentially important to me</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- is important to accounting and finance</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- relates to an area I want to know about</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- complements other courses</td>
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<tr>
<td>- should be challenging</td>
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<td>1 2 3 4 5</td>
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<tr>
<td>- will make me think</td>
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<td>1 2 3 4 5</td>
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<tr>
<td>- will expand my education</td>
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<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- will be easier than other options</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- will require less work than other options</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- is more likely to lead to a higher class of degree</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- was recommended by other students <em>who had taken the course</em></td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- was recommended by other students <em>who had not taken the course</em></td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- was recommended by my adviser/staff member</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- is given by [a] lecturer that I like</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- reflected restricted option choice</td>
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<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- will help my career</td>
<td>0</td>
<td>1 2 3 4 5</td>
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<tr>
<td>- will be of interest to job recruiters</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- will look good on my CV</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- will be enjoyable</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- addresses ethical issues in accounting and finance</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- will address my concern about the environment</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- addresses my dissatisfaction with accounting and finance</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- had interesting prerequisite course(s)</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
I CHOSE SOCIAL AND ENVIRONMENTAL ACCOUNTING AS AN OPTION

Reasons why I rejected other options (Please circle all that apply)

<table>
<thead>
<tr>
<th>Possible reasons for rejection: the other course option(s)...</th>
<th>Not a reason</th>
<th>Weak influence - Strong influence on my decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>- is unlikely to be interesting</td>
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<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- is not different from other courses</td>
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<td>1 2 3 4 5</td>
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<td>- is more quantitative than qualitative</td>
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<tr>
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<td>1 2 3 4 5</td>
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<tr>
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<tr>
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<td>- will make me think</td>
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<tr>
<td>- will not expand my education</td>
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<tr>
<td>- will be more difficult than SEA</td>
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<tr>
<td>- will require more work than SEA</td>
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<td>1 2 3 4 5</td>
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<tr>
<td>- is less likely to lead to a higher class of degree</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>- was not recommended by other students who had taken the course</td>
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<td>1 2 3 4 5</td>
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<td>- won’t address my concern about the environment</td>
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<tr>
<td>- contributes to my satisfaction with accounting and finance</td>
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<tr>
<td>- did not have interesting prerequisite course(s)</td>
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</tbody>
</table>
I DID NOT CHOOSE SOCIAL AND ENVIRONMENTAL ACCOUNTING AS AN OPTION

Reasons why I chose ................................ (Please state) as {an} option
(Please circle all that apply)

<table>
<thead>
<tr>
<th>Possible reasons for choice: The course option(s) I chose....</th>
<th>Not a reason</th>
<th>Weak influence - Strong influence on my decision</th>
</tr>
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<tbody>
<tr>
<td>- should be interesting</td>
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<tr>
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<tr>
<td>- had interesting prerequisite course(s)</td>
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</tr>
</tbody>
</table>
I DID NOT CHOOSE SOCIAL AND ENVIRONMENTAL ACCOUNTING AS AN OPTION

*Reasons why I did not choose social and environmental accounting as an option*  
*(Please circle all that apply)*

<table>
<thead>
<tr>
<th>Possible reasons for choice: the social and environmental accounting course...</th>
<th>Not a reason</th>
<th>Weak influence - Strong influence on my decision</th>
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<tbody>
<tr>
<td>is unlikely to be interesting</td>
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<tr>
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<tr>
<td>will make me think</td>
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<tr>
<td>will not expand my education</td>
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<tr>
<td>will be more difficult than other options</td>
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<td>1 2 3 4 5</td>
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<tr>
<td>is less likely to lead to a higher class of degree</td>
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<td>1 2 3 4 5</td>
</tr>
<tr>
<td>was not recommended by other students <em>who had taken the course</em></td>
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<td>1 2 3 4 5</td>
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<td>was not recommended by other students <em>who had not taken the course</em></td>
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<tr>
<td>is given by a lecturer that I do not like</td>
<td>0</td>
<td>1 2 3 4 5</td>
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<tr>
<td>was only one of many possible option choices</td>
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<td>will not help my career</td>
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</tr>
<tr>
<td>will not look good on my CV</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>will not be enjoyable</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>addresses ethical issues in accounting and finance</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>is too concerned about the environment</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>will not enhance my satisfaction with accounting and finance</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>did not have interesting prerequisite course(s)</td>
<td>0</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
Instrument D: Interview template for interviews with recruiters

Recruiters

(1) What skills/attributes are you looking for when recruiting students for professional accountancy training posts?

(2) To what extent do you agree with the selection criteria set out in the Simon and Kedslie (1997) article? (Interviewee to be shown criteria list). Any comments about the selection criteria as set out in the Simon and Kedslie article?

(3) To what extent do you think that as accountancy recruiters, you adequately communicate these requirements to accountancy students? Any comments or views?

(4) To what extent do you think having a relevant (fully accredited) accountancy degree helps students in the recruitment process? Any reasons why?

(5) The Accounting Education Change Commission (USA) made the following recommendations for the academic preparation of accountants, to improve their capabilities for successful professional careers in practice:
· A greater knowledge of the liberal arts, rather than a narrow technical knowledge (repetitive learning of accounting standards).
· Teaching of business ethics, communication skills, mathematics and statistics.
· An increase in the time spent in accounting education at university.
· Increasing the critical thinking ability of students.
Any views or comments?

(6) Do you think accountancy students should take environmental accounting options at University? Do you think that taking this subject could add to or detract from an accountancy student’s attraction for you as recruiters?

(7) Do you have any personal views on the environment? Views/Comments?
(8) To what extent is the welfare of the natural environment important to you? Why?

(9) Do you have any knowledge of the role of any professional accountancy bodies in the environmental debate? *Any personal views of the professional bodies’ initiatives?*

(10) Your firm and the environment:
(a) Should accountancy firms be active in the environmental debate?
(b) Is there any link between the accountancy profession’s claim to serve the public interest and environmental debate?
(c) Does your firm have any policy in relation to environmental issues?

11) Accountancy students and the environment:
(a) What specific areas of knowledge do you think it is important for accountancy students to have of environmental issues?
(b) Most accountancy students don’t take environmental options at university, do you think therefore that there is a gap in their university education? *Any comment?*

(12) Do you have any views/comments over the long term future of accountancy, and the accountancy profession, in terms of the environmental debate?
- Can you speculate on future developments to the accounting profession, in terms of the environmental debate?
- Will ‘Sustainability’ become an issue to the accountancy profession?
Instrument E: Questionnaire sent to accountancy recruitment offices

Views of recruiters regarding the personal qualities and prior educational experiences of accountancy trainees. This information will be treated in the strictest confidence

Please tick boxes where appropriate

SECTION 1: Background Details

Your position in your firm ........................................................................................................

Name of firm ..........................................................................................................................

Region/Town .....................................................................................................................

Approximate number of students which you are responsible for recruiting for your firm annually ........................................................................................................................

Approximate number of Partners within your firm ..........................................................

SECTION 2: General Recruitment

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Have you filled your student requirement for this year (Autumn 1998)?</td>
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<td>2</td>
<td>Is filling your student requirement, compared to previous years (please tick one box):</td>
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<tr>
<td></td>
<td>(a) harder</td>
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<td></td>
<td>(b) easier</td>
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<td></td>
<td>(c) about the same?</td>
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<td></td>
<td>(d) don’t know</td>
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<tr>
<td>3</td>
<td>Is the quality of students applying for jobs with your firm:</td>
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<td></td>
<td>(a) increasing?</td>
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<td></td>
<td>(b) decreasing?</td>
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<tr>
<td></td>
<td>(c) remaining the same?</td>
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<tr>
<td></td>
<td>(d) don’t know</td>
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</tbody>
</table>

Any comments:
### SECTION 3: Qualities of accountancy trainees

*(1 signifies Not at all and 5 signifies To a great extent)*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>Don’t know</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not know</td>
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<tr>
<td></td>
<td>Do you, as an accountancy firm, communicate the skills you require from accountancy students?</td>
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</table>

If so, how?:

*(1 signifies Strongly disagree, 5 signifies Strongly agree)*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<tr>
<td>2</td>
<td></td>
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<tr>
<td>As a firm we prefer to recruit graduates with a relevant accountancy (fully accredited) degree.</td>
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<td>3</td>
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<tr>
<td>As a firm we feel accountancy graduates make better students for professional training than non-accountancy graduates.</td>
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<td>4</td>
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<tr>
<td>As a firm, we would prefer to recruit students with a greater practical knowledge of accountancy than at present.</td>
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<td>5</td>
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<tr>
<td>As a firm, we would prefer to recruit students with a greater theoretical knowledge of accountancy than at present.</td>
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<td>6</td>
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<tr>
<td>We see accountancy students with too much theoretical knowledge as a hindrance to our firm.</td>
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<td>7</td>
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<tr>
<td>As a firm, we would prefer accountancy students to have more critical thinking ability than at present.</td>
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<td>8</td>
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<td>As a firm, we place a greater emphasis in recruitment on personal skills (eg. communication skills and presentation) than on accounting skills and knowledge.</td>
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<td>9</td>
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<tr>
<td>As a firm we feel it is our job to signal to accountancy students our skill requirements.</td>
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<td>10</td>
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<tr>
<td>As a firm, we feel it is the job of our potential accountancy students to research the skill requirements we need.</td>
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</table>

Comments (if any):
SECTION 4: Environmental Issues

The next part of the questionnaire deals with the significance of environmental issues for the education and training of accountants.

It could be argued that current accounting practice, by ignoring the costs of environmental externalities, actively contributes to a collective environmental complacency. In contrast it could be argued that the role of accountants should be limited to reflecting financial transactions within the current, albeit developing, legal framework. Between these two positions lie intermediate views of what the profession’s role and responsibilities should be. This whole range of views is reflected in the many initiatives which are being undertaken by professional accounting bodies (including ICAS), standard setters, governments and supra-national bodies around the world.

If accountants are to make informed judgements of the need, if any, for fundamental change in the way economic activity is analysed and reported, the implications for basic education and training could be profound. This questionnaire attempts among other things to assess the scale of concern, if any, about these issues.

(1 signifies Strongly disagree, 5 signifies Strongly agree)

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<tbody>
<tr>
<td>1</td>
<td>Our firm has an active response to the developing environmental agenda:</td>
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<td></td>
<td>(a) as it affects our own internal procedures.</td>
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<td>(b) as it affects our clients.</td>
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<td>2</td>
<td>As a firm, we are aware of the activities of the professional accountancy bodies on environmental issues.</td>
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<td>3</td>
<td>In my opinion, it is important for the professional accountancy bodies to be involved in the environmental debate.</td>
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<td>4</td>
<td>In my opinion, there is a clear link between the accountancy profession’s claim to serve the public interest and the environmental debate.</td>
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<td>5</td>
<td>Accountancy students who take environmental accounting options at university are more attractive to this firm than those who do not.</td>
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<td>6</td>
<td>In my opinion, accountancy students who do not take environmental options at university have a gap within their university education.</td>
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<td>7</td>
<td>The welfare of the natural environment is important to me personally</td>
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Comments (if any):
**SECTION 5: Desirable Student Attributes**

In 1996, Simon and Kedslie (University of Hull) asked 272 accountancy firms in the United Kingdom to score the attributes they looked for when recruiting students. Below are a selection of the attributes found by this study, please indicate how importantly you view each of the criteria:

*(1 signifies Not at all, and 5 signifies To a great extent)*

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<th>Don’t know</th>
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<tbody>
<tr>
<td>Oral communication skills</td>
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<td>Integrity/high ethical standard</td>
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<td>Professional appearance and presentation</td>
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<td>Written communication skills</td>
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<td>Ability to work in a team</td>
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<td>Drive and motivation</td>
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<td>Interpersonal sensitivity/skills</td>
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<td>Energy and enthusiasm</td>
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<td>Numeracy skills</td>
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<td>‘A’ level/Higher grade performance</td>
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<tr>
<td>Student studying for a relevant degree</td>
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<td>Confidence</td>
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<td>Problem solving skills</td>
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<td>University with above average academic reputation</td>
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<tr>
<td>Reacts positively to pressure</td>
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<tr>
<td>Comments (if any):</td>
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</table>