Can't See The Wood For The Trees, Can't See The Trees For The Numbers? Accounting Education, Sustainability and the Public Interest[1]

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Abstract

This paper is an attempt to explore the question “what do accountants need to know about the environment?” with a subsidiary question “how are they to acquire this knowledge?”. These questions prove to be more complex than they appear and raise questions about the meaning of “environment”, the purpose and role of accountants, the structure of the UK accounting profession and the role of education. Central to the paper is the belief that accounting is supposed to serve the public interest and that the pursuit of sustainability is central to that public interest. It is contended that only through, what we call, “transcendent” education can this notion be understood, let alone acted upon. The paper calls for a clearer expression of the relationship between education and training, and argues that the only way in which accounting can remain a profession, serve the public interest and respond to the exigencies of sustainability is through a major revision of accounting degrees and a relevant graduate only profession. The paper is predicated upon the belief that a profession with no real education (as opposed to training) in the subject matter of its profession is a contradiction in terms.

1. Introduction

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 to investigate and encourage the integration of environmental issues into the heart of (especially) professional education and training, (see Forum for the Future, 1999).

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. This paper is an exploration of how the accounting profession and accounting education might begin to rise to this challenge.

This paper is first and foremost a polemical essay. Its central contention is that there are a number of fundamental questions that need to be asked - about accounting, about education and about environmental issues - before the apparently simpler question of how environmental issues may be integrated into the discipline can be properly answered. The essay draws from both published argument and published research - in accounting and elsewhere - but also draws heavily from new research undertaken for a larger project into accounting education and the environment, (Gray et al, 2001). That research is not formally reported here but is drawn from as appropriate.

Consequently, this paper is structured as follows. The next section addresses the central contention of the paper - in essence seeking to identify the research problem. Section 3 then addresses methodological and research design issues which arise from the nature of this essay and its employment of the prior research undertaken for the larger project. The body of the paper then comprises: a brief exploration of accounting, the environment and sustainability (Section 4); a brief review of some of the key issues for education which arise from the environmental debate (Section 5); a review of the state of accounting education in universities and the current place of environmental issues within that education (Section 6); and a review of practitioner and professional views and attitudes to accounting education in general and environmental education in particular (Section 7). An attempt is made to pull together the key themes and to briefly suggest future developments in the final section of the paper.

2. The "Research Problem"

Seeking to explore how we might embed the developing environmental agenda into current systems of professional education, whilst certainly not a simple task, does not - on the surface at least - look like an especially profound task either. Such an endeavour would probably need to establish how far environmental issues had already been integrated into education and to explore what impediments appeared to be preventing its further integration.

However, such an approach is predicated upon the assumption that we know what we mean by "environment". Whether we are talking about engineering, philosophy, politics, architecture, accounting or finance, for example, there needs to be some explicit clarity over what is this thing that we wish to see integrated into our education. For the sake of illustration we might typify two views of "environment" as,
to use Bergstrom's (1993) terms, "marginal" or "structural". The environment perceived as "marginal" offers no challenge to the current orthodoxy, its preconceptions, institutions or intentions. Environmental issues are thus seen as, typically, an array of relatively minor problems that are to be conceived of - and resolved - entirely within current systems of economic, social and financial organisation, (see, for example, Ekins, 1990). On the other hand, to see environmental issues as "structural" is to consider that the environment goes to the very root of what it is to be human, that the very scale and the ethical accoutrements of the environmental crisis place in question all the elements of modernity. Under a structural perspective, no element of current orthodoxy - be it economic growth, distributions of wealth, the institutions of civil society, the organisation of work or our concepts of consumption, production, social structure or whatever - can be taken for granted.

It is clear that attempting to integrate environmental issues which are perceived as "marginal" is a great deal simpler than trying to integrate "structural environmental issues". (Structural environmental issues would be more usually referred to as a concern with sustainability - but here also we see attempts to trivialise that term and make it a marginal concept. See, for example, Bebbington and Thomson, 1996; Gray and Bebbington, 2000).

A similar, but certainly related, problem occurs when we try to examine the system into which we intend to embed our notion of "environment". That is, what do we think we mean by the term "education"? Again, for the purposes of illustration, we might typify two views of education. One such view might see the function of education as to provide students with the wherewithal to undertake gainful and "productive" employment. Education would, under such a view, be seen as something whose effectiveness is adjudged by the employability of its graduates, its vocational relevance and its responsiveness to the needs of industry and commerce. The opposing view of education might see the purpose of education as to serve and help develop a civilised and just society through the development of well-read, thoughtful, scholarly individuals with a well-developed capacity for independent critical thought - what Bowen and Hobson (1993) call "transcendence". Whilst the two views may not be entirely incompatible, it is worth noting that a key manifestation of transcendence would be the encouragement of students to make up their own minds as to the propriety and desirability of the vocational skills that teachers might seek to inculcate. It is also obvious, we believe, that the transcendental-educated student would find the embracing of sustainability a great deal easier than would the vocationally educated who would, in turn, probably find marginal environmental solutions the much less exceptionable.

These two tensions - marginal versus structural/sustainability conceptions of the "environment"; and vocational versus transcendental approaches to education - would appear to apply equally to all branches of work and education. When we turn to examine accounting education and practice, they are thrown into stark relief and, in turn, raise two further tensions.

That is, accounting is so closely implicated and embedded in the very structures of modernity that, it seems, it must be inclined to see environmental issues - to the extent that it notices them at all - as marginal issues. Similarly, and as is very well-documented (see, for example, French et al, 1992; Gray et al., 1994; Humphrey et al., 1996; Lee, 1989; Zeff, 1989, accounting education suffers from an acute tension between its role in inculcating technical (vocational) expertise for future practice and its wider, critical, educational (transcendent) roles.

What, additionally, appears to make the situation in accounting (potentially) so much more intractable is that (a) there is clearly a significant dichotomy of views over whether the principal purpose of the accounting profession is to serve the clients' needs or to enhance the public interest; and (b) especially in the UK only a minority of qualified accountants hold relevant degrees. The first of these issues arises because, as far as we can judge, the accounting profession has never explained its public interest role and how, in the inevitable tensions that must exist between serving the public interest and serving clients, such tensions are to be resolved[2]. The second issue raises the peculiar spectre of a profession, the majority of whose membership has never received any education - as opposed to training - in the subject. These tensions are summarised in Figure 1.

**FIGURE 1: The Environment and Accounting Education**

<table>
<thead>
<tr>
<th>The Range Of Issues</th>
<th>Principles Driven</th>
<th>Client Driven</th>
</tr>
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<tbody>
<tr>
<td>Sustainability</td>
<td>The Environment</td>
<td>Marginal Issues</td>
</tr>
<tr>
<td>Public Interest</td>
<td>The Profession</td>
<td>Client-Serving</td>
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<td>Transcendence</td>
<td>Education &amp; Training</td>
<td>Technical</td>
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<tr>
<td>Central</td>
<td>Relevant Degrees</td>
<td>Not Important</td>
</tr>
<tr>
<td>An &quot;Academic View&quot;</td>
<td>A &quot;Practitioner View&quot;</td>
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The essential point we wish to make with the dichotomy shown in Figure 1 is that one cannot start to resolve an apparently simple tension about environmental issues until some fundamental questions are themselves resolved. Furthermore, if one took, say, the so-called 'practitioner view' then even if one remained committed to a view of environmental issues as structural, such matters would both be largely irrelevant (as in, "nothing to do with me") and insoluble even if they were relevant (as only the client's manifestation of environmental issues could be embraced and then only as a technical issue within training).

It is these issues which are further explored and developed in the remainder of the paper. However, before proceeding to the body of the paper, it behoves us to say a word or two about the way in which we have approached this problem and, in particular, our epistemological claims in the remainder of the paper.

3. Some Issues of Methodology and Research Design

Although this paper is intended, principally, as an essay whose epistemological claims rest primarily on argumentation (based, in turn, upon evidence and argumentation in prior studies), we do also intend to introduce new evidence to the argument - but without offering a formal or conventional reporting of the sources of that evidence. To do this runs counter to convention in reporting research. It asks the reader to accept, as evidence, selected quotations from interviews, summary results from questionnaires and such like but with little or no supporting explanation to permit the reader to judge the source and reliability of that evidence, (but see Gray et al., 2001). Can we do this?

The problem arises from (a) the nature of this paper as an attempt to synthesise and develop a prior project and (b) the nature of that
prior project. That project (Gray et al., 2001) comprises three separate questionnaire surveys (see also Collison et al., 2000; Stevenson, 2000) and 5 separate sequences of interviews. The broad conclusions from those separate themes of enquiry are summarised, for illustration, in Figure 2.

The issue, as we see it, is threefold. First there is the practical matter that reporting the detail of the research approach used in each of the studies would take many pages and, in fact, be rather tedious. The second problem arises from the attempts to combine and synthesise separate studies which were notably iterative, exploratory and opportunistic in nature and which were not formally designed to link together as methodologically compatible. Finally, and perhaps most significantly, our contention is that the value of this paper - and indeed the project from which it draws - lies in the synthesis and collective inference drawn from the separate studies, not in the individual studies per se. Thus, the individual enquiries are not offered as formally communicated specific pieces of evidence but, rather, are the activities that we undertook in order to gain a personal understanding of the issues that would permit us to clarify our own point of view and then tell a story - this essay.

It is not clear where that leaves the epistemological claims of this paper. We tentatively seek to claim support from Morgan (1983) and argue that all social science research is a process of uncovering, developing and communicating increasingly sophisticated understandings (see Morgan, especially Chapters 1 and 2). In which spirit, we offer a story that has helped our understanding of the issues. We do so, through the present form of communication, as a focus for debate and as a means of possible sharing of understanding. Its claims will be decided by the reader.

FIGURE 2: Summary of General Findings from the Project

<table>
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<th>Universities</th>
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| Non-Accounting Academics (Literature review + 9 unstructured interviews) | • Unless deep-green by belief, see environmental issues as marginal and probably adequately covered in specialised courses;  
  • Why prioritise the environment?  
  • Sustainability not understood and not a motivating factor;  
  • Toyne Report has little impact;  
  • Self-discipline, lack of knowledge/awareness, inertia. |
| Accounting Academics (22 unstructured or semi-structured interviews + 102 postal questionnaires) | • No major change in last few years;  
  • No major impediments to introducing environmental issues;  
  • Environment grown in importance but not seen as crucial;  
  • Why prioritise the environment?  
  • Views of accounting and education important;  
  • Life is too hard for innovation - simplicity sought. |
| Undergraduates (14 unstructured or semi structured interviews + 216 applied questionnaires) | • Choice of course is a function of interest and orientation;  
  • Majority choose courses by perceived career relevance;  
  • Environment not seen as career-relevant;  
  • Environment not seen as especially interesting;  
  • (Perceived) career values more influential than independent personal values;  
  • Views of what comprises accounting are important |

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<th>Practice and the Professional Bodies</th>
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| Recruiters (11 semi-structured interviews +200 postal questionnaires) | • Rarely see value in relevant degrees;  
  • Indifferent on environmental issues;  
  • Social skills far more important than accounting skills;  
  • Scots and non-Big 5(6) more pro-relevance and practicality than others;  
  • Favour “critical thinking” and broad education |
| Practitioners, Opinion Formers, Professional Bodies (14 semi-structured interviews) | • Accountancy is a client-orientated activity;  
  • Effect on client principal determinant of interest - in environment as anything else;  
  • Why prioritise the environment?  
  • Environment seen as marginal but increasing in importance;  
  • Sustainability not widely understood or recognised as important;  
  • Majority see no point to relevant degrees;  
  • There is a steady growth of environmental activity in the profession - but it is very “marginal” in nature. |

4. Accounting, the Environment and Sustainability

How do we view accounting and its purpose? Do 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 as having some more independent existence as, for example, a critical component of democracy or driven by the exigencies of the public interest? It rapidly becomes apparent that our choices in this regard have a major impact on what we consider to be "environmental accounting". 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

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[2]), 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, below, 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 5 years of concerted effort, matters had continued to get worse, (see, for example, Brown and Flavin, 1999).

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, yes"[2]. 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 unthinkable[3]. 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.

Central to this paper is that education of any substantial sort (see below) would make such statements impossible.

Accounting and the environment

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;
- the 'managerialist' literature; and,
- the 'middle-of-the-road' or 'reformist' literature.

The critical literature (drawing from, for example, a feminist - Cooper, 1992; Cooper et al, 1992; - or a radical environmental perspective - Burritt and Maunders, 1991; Gray, 1992) provides 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. Such perspectives would answer the question "what do accountants need to know about the environment?" along the lines of "we do not actually need accountants - or at least not accountants as we would currently recognise them". The essence of this growing literature is a series of fundamental challenges to the current nature and purpose of accounting. The theoretical sophistication of such a challenge provide a constant test for our reasoning in developing accounting - not least environmental accounting.

The managerialist literature comprises, broadly, three components: a recognition of the ways in which the developing environmental agenda is changing the financial numbers with which accounting deals (e.g. energy costs); a steady increase in the 'new' categories of financial numbers that the environmental agenda is producing, (e.g. 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. 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, to be essentially conservative in orientation and governed by the syllabi of the professional...
accounting bodies plus current practice in the area.

The middle-of-the-road literature (for a critique see Tinker et al., 1991) seeks to bridge between the managerialist and the critical. 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 a 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 below).

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 seeks 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.

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) 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, 2001; 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-sustaining 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 3.

FIGURE 3. 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>

Adapted from Gray and Bebbington (2001)

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. And certainly government policy can play a major role in encouraging business to do just this. But, the very nature of companies is 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; 1996b).
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.

The level of resolution at which we conceive of "environmental issues" determines how we perceive them - either "marginal" or "structural" (Bergstrom, 1993). 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. Not only are current practices in accounting seemingly ill-equipped to address these demands but, much more pertinently in the present context, it is far from obvious that accounting practitioners, academics and teachers are predisposed or even equipped to even consider such contentions.

5. Education, The Other Professions and Environmental Issues

From Plato, through Rousseau, Dewey and Marx to Ilich 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 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 (e.g.)"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.

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 (transcendental) 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.

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 discussion above 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. Obviously, the most effective means of establishing such hegemony is the education system. Thus 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. (A central criticism of accounting education is that it constitutes a very clear case of indoctrination - see, for example, Loeb, 1988). The matter can be seen as fairly simple: 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.

Such matters are brought into sharp relief when the matter of vocational education is considered. (See Paisley and Paisley, 2000).

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 specialistism, 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 change in 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 inculturated into the current professional orthodoxy, may be unable and/or unwilling to provide the basis and support for such a challenging educational experience.

This is a tension which appears to be generic amongst the professions - and certainly not limited to accounting. 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[14]). 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[15].

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[16].

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[17]. 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)

But even here, as the phrases "environment-related skills" and "environmental competence" suggest, the consideration is entirely of the environmental agenda as marginal. This, in turn raises the question as to whether or not functional, professional bodies can embrace the range of questions that a thorough examination of the environmental agenda brings - can they in fact even conceive of the potential challenges that a structural or sustainability-based approach to environmental issues might bring? A priori it seems unlikely. This, in turn, suggests to us that the only place where environmental issues could potentially be given the deep attention they demand is, despite the comments above, in the universities.

As far as we are aware, the examination of how professional-based university disciplines[18] might embrace, first, environmental and, second, sustainability agendas is not especially well-developed. Indeed, and as might be expected, a great deal more attention has been given to the addressing of functional and competence based environmental matters than has been given to addressing the structural implications of sustainability[19].

Direct contact with educators in disciplines other than accounting - some professionally-based (law, medicine, engineering and planning) and some not (politics, philosophy and psychology) - offered some insights into the difficulties that university discipline might face in addressing environmental and sustainability issues, (see Gray et al, 2001). In essence, environmental issues entered university curricula through two routes. On the one hand, a particular educator with an interest and commitment to the issues might introduce the issues and eventually develop specialist courses covering environmental and/or sustainability issues as they relate to that discipline. On the other, as professional functional areas develop - for example environmental law, or environmental management - university courses would develop to reflect these professional developments. The former route appeared to be the more likely to address more complex and controversial issues - such as the demands of sustainability - whilst the functional specialisms were more likely to emphasise marginal issues in a skill-based and "usefulness" context. But even here, and apparently regardless of discipline, the degree to which structural issues were addressed in education appeared to be, primarily, a function, of the individual teacher's beliefs and, more interestingly, their perceptions of what was "acceptable" in their discipline. There was, it appeared, a strong Foucauldian exercise of self-discipline over even the more critical of teachers and even in disciplines such as philosophy and politics where, a priori, this might not be expected.

Furthermore, amongst those teachers whom we interviewed who did not formally address environmental issues in their teaching
something we believe to be of critical importance emerged. That was, when teachers were asked why they did not address environmental/sustainability issues in their teaching, responses were always a combination of (a) why prioritise the environment? and (b) such matters are dealt with in the course on environmental law, environmental management environmental design or whatever. This, in turn raises two interesting issues. First, are environmental issues more important than (say) issues of feminism, community, race, religion etc? Which issues are to be privileged as having priority over and/or providing the framework for more innovative and critical teaching? Second, without a specific understanding of why tensions must arise between a marginal versus a structural perception of environmental matters, educators will, inevitably it seems, assume that the existence of a specialist functional area dealing with environmental matters has solved whatever problem might have existed.

These observations raise questions that may well be worth further exploration. Such questions must include the basic one of whether or not there is a convincing and substantive case to be made that marginal and structural perceptions of the environment are importantly different. More especially, there are questions about how academic disciplines are constructed, how academics themselves conceptualise their disciplines and their roles within it, the extent and construction of the apparently innate conservatism in university education and, finally, the extent to which educators generally have any deep understanding of the exigencies of sustainability. The implication appears to be that educators need both liberating and educating!

These matters are now explored within the context of accounting education.

6. University Accounting Education and the Environment

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. 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.[23] The significance of this is that one doesn't need to look far in order to come across widespread disquiet about the current state of accounting education in universities. Such disquiet is expressed by academics, professionals and employers alike. There has been disquiet about accounting education for some considerable time[21] and the arguments ring as relevant today as they did when first voiced[22]. The causes of the disquiet, although not unrelated, are not entirely homogeneous. They tend to fall into three broad areas of concern.

First, there is the concern that accounting education places too much emphasis on rote and/or shallow learning. As Zeff (1989) argues:

"... 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...." (p167).

This argument is developed also by authors such as Page and Hopwood (1986), Gambling (1983), Mueller (1994), Sterling (1973), Ferrera, (1975), The Bedford Committee Report of 1985, Preverts and Schultz (1989).

The second concern tends to be expressed around the observation that accounting education encourages insufficient intellectual and/or ethical development together with a lack of critical intellectual independence:

"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)[21].

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[24] 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 (1989) and Loeb (1998) 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, McPhead and Gray, 1996). This is, indeed, indoctrination and illustrates our discussion above of the power of hegemony. Accounting education would appear to be a significant element in the maintenance of that hegemony.[25]

The final main thrust of criticism of accounting education relates to it providing an inappropriate preparation for employment. There would appear to be two, apparently conflicting, views held by practitioners about the output from university accounting education[26]. 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 below). 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.[27]

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, (see, for example, Gill, 1993; Gynther, 1983, Beresford and Johnson, 1995).
Nobody, it seems, is happy with accounting education but how the matter might be resolved - especially in terms of whether university degrees in accounting should be primarily concerned with training or transcendence - remains highly contentious. Even the well-supported establishment of the US's Accounting Education Change Commission (AECC) in 1989 has, apparently, been unable to break down the problem (see, for example, Patten and Williams, 1990; Reider and Hester, 1994; Nelson, 1995; AECC, 1999).

This failure to reach any conclusions on how accounting education in universities might be best developed points, we believe, to failure to address the right issues. That is, the problem is more complex than analyses such as the AECC 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 academic 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.

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. These include:
  - 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?

It is into this confused and entirely unsatisfactory situation (although see Houghton and Hronsky, 1993 for a somewhat contrary view) that we need to explore the introduction of environmental (and social) issues for accounting education.

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; Eates, 1975; Brummet, 1975; Mathews, 1995a) it is only in recent years that there has been much in the way of significant (observable) development. Owen et al. (1994) and Humphrey et al. (1996) summarise 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.

More pertinently, Owen et al. (1994) concluded that there were few substantive, institutional, impediments to the development of social and environmental accounting teaching. More recent work (Stevenson, 2000) has confirmed that little has changed. The key issue, however, seems to be whether educators do - or can - develop courses and, if not, why not. .

One reason that emerges is that there is little demand, perhaps even resistance, from students (see, for example, Blundell and Booth, 1988; Lewis et al, 1992). A recent study by Collison et al (2000) largely confirms this concern. That study suggests that students make their choices of options at university for the reasons of enjoyment, anticipated success, interest and the like. However, the majority of students (who do not choose to do social and environmental accounting options when the opportunity exists) tend to relate these
characteristics (of enjoyment, interest etc) to their perception of themselves in future employment. The minority who choose social and environmental accounting options tend to relate these characteristics to their personal views of what matters to them personally not in terms of future careers - to their self actualisation if one will. Whether the students share some prior conceptualisation of the profession and/or acquire this through the way in which accounting is taught and represented at university remains something of an open question.

What, though, of the teachers themselves? If they see no formal impediments to developing either critical independent minded-students and/or teaching environmental (and social) accounting why does it happen as little as it does? A series of interviews with senior accounting academics shed light on this question.

Initial interviews with 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 in this paper. The following quotes 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. And this seems to echo what was found earlier from the questionnaire to teachers - there are no deliberate blocks on teaching innovation, (Stevenson, 2000). 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 regarding 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). So we then switched our attention to focus in 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.

The first thing 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 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, scholarly practice 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, 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 wasn't 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 is much food for thought here and little of it paints an optimistic picture about accounting education in general or the future development of environmental and social accounting education in particular. More fundamentally, though, in so far as there are strong similarities between the themes running through the accounting educators' minds and those which ran through the non-accounting academics' there are raised some very fundamental question about the universities, their roles and the pressure under which they exist.

With a somewhat clearer picture of the academic and teaching issues in our mind, we turn, in the penultimate section of the paper, to look at the profession and developments there.

7. Practitioners, Recruiters, Professional Bodies and the Environment

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 themselves 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 tensions 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.

Given the above, if any progress is to be made towards a less indoctrinating accounting education which could embrace environmental issues for other than instrumental reasons and permit a structural environmental perception to be addressed then we need to have to the front of our minds both the structure of the accounting profession and the views of its members. As is well established, Britain has no homogeneity in the educational background of its practitioners and a relatively small proportion of UK accountants (certainly outside Scotland) have any education (as opposed to training) in accounting. This situation appears to be both the result of and an influence upon the academic-practitioner relationship which, in the UK at least, is a far from happy one. (See for example, Power, 1989; Napier and Power, 1992). This relationship appears to be worsened by both the profession's constant re-appraisal of what it is to be an accountant (and consequently what needs to be included in the professional syllabi) and the apparent failure of relevant degrees to produce students who are either well-groomed for practice or well-developed independent, critical thinkers. At the heart of these tensions we would, however, place the question of accounting's role and, in particular, whether it really does, or can show that it does, serve the public interest, (see, for example, Briloff, 1986; Puxty et al, 1997).

"... 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]

The essence of the concern as we see it is that if an accountant, by serving his/her clients' current and immediately future needs is thereby, unequivocally, serving the public interest then many of our problems disappear. An accountant would, thus, need to be trained (and only to a lesser degree perhaps educated) in the mechanisms that clients currently needed and were likely to need in the near future. Broader issues arising from a transcendent education would be inappropriate and unnecessary. Equally, the knowledge of environmental issues needed would equally be determined by those client needs.

If, however, accounting is a profession with a basis which is independent of clients and/or if it cannot show that serving clients serves the public interest, then defining the public interest is a more difficult - and pressing - matter. At a minimum, such a view requires that 'we need a more intense and wide-ranging education in order to be able to address such complex issues. It also means, fundamentally, that environmental issues need to be addressed in terms of society rather than in terms of client needs.

Whilst significant steps have been taken by elements of the accounting profession in developing environmental issues, (and, indeed, there are the beginnings of the introduction of environment into professional syllabi[20]) they have been, with few exceptions, of a reactive, marginal and managerialist nature. There certainly has been no attempts, as far as we can tell, to re-examine accounting from a structural, sustainability context.

A closer examination of practice and the professional bodies offers only a little cause for optimism.

Recruiters are, at best, indifferent to relevant accounting degrees (see, for example, Simon et al, 1996; 1997) and our own research (Gray et al., 2001) confirms this. Furthermore, accountancy recruiters are, at best, indifferent to whether or not new recruits to the profession have any (let alone substantial) exposure to environmental issues. Whilst a majority of recruiters did see environmental issues as linked to the public interest, less than 10% saw a lack of environmental education as being of any importance. When we widen out from simply "recruiters" to members in practice and involved with the professional bodies we find a rather more diverse set of views on the status of environmental issues.

Environment - Marginal or Structural?

In only three of the interviews with members in practice and involved with the professional bodies 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 help 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 just a flavour of the range of views and confirms the need for a 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" ones 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[31].

The Profession and the Role of Accountants

As we have already touched upon above, central to our discussion is the question of the role(s) of accounting and accountants. 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 and 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[32] 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 - see Figure 2 - 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. 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. 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 and professional training. 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:

"...environmental issues should be part of an accountant's training..." [Senior staff member of professional body]

"[Issues such as] eco-efficiency, sustainability, products, purchasing etc. ... 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 below when we touch on the apparent tensions in views and the role of relevant degrees. 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. 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 the question of how the profession sees itself and wishes to re-imagine itself for the future. In addition, there are very real practical problems: accountants now serve in such a wide array of functional activities; and the 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 - of the accountant's background? As we see below, the most obvious solution - development of the relevant degree - is a relatively unpopular one. How, if at all, are environmental issues then to be integrated into the training process? 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]

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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.

The Role of Relevant Degrees

Amongst the range of individuals that we 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 United Kingdom, 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, Big Five Firm]

“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’.

A significant and closely related issue was the role of academic accountants - on the grounds that if there are few relevant graduates there will be fewer accounting academics. It may well be a majority view that practitioners do not know what accounting academics are for but a majority 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 above: 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 professional body]

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 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.

8. Conclusions and Discussion

Accounting education continues to be a matter of acute concern to accounting academics, practitioners and professional bodies alike. Not just matters of educational delivery and levels of expertise expected of student accountants but fundamental questions concerning the content, the objectives and the central intellectual and moral values needed in accounting education remain profoundly unresolved.

Whilst the professional bodies in, for example, the US, the UK and Australia seek - almost perpetually it seems - to re-invent themselves through their education and training syllabi the evidence of the failures of accounting education to meet either aspirational educational or practical, work-orientated objectives continues to mount.

That such a situation can continue to obtain is, quite properly it seems to us, a matter of gravest concern and one deserving of our most careful attention. Our concerns might stem from a number of sources. We might, for example, have: a moral concern that educators are guilty of indoctrination; a professional concern over a failure to inculcate the highest standards of scholarship and critical reasoning into the young minds we have in our charge; a pragmatic or economic concern that the considerable resources consumed by education are not being effectively deployed; or a (possibly naive) concern that the accountancy profession is failing to fulfil its duty to maintain the
educational foundation of its professional claims. Whatever its source, it is difficult to find any coherent argument as to why such a situation is other than undesirable or, more especially, how such a situation can arise and can fail, for so long, to achieve any resolution. What commends this situation so forcefully to us in this paper, is the growing realisation that the continuing "debates" over accounting education are rarely debates at all. Not only are the discussions failing to achieve any sort of intellectual engagement between (for example) the utterances of the big firms and the more educationally motivated scholars but there seems a widespread inability to recognise that such failures to engage probably lie in the failure to address fundamental questions about education, the profession and accounting. The "debates" thus entirely miss the point, (if, indeed, the point is to resolve conflict and not just to serve a rather crude set of self-interests).

Little illustrates this more clearly than the whole debate in and around the USA's AECC which, despite massive resources and very detailed debate, research and experimentation, seems no further forward in resolving the central questions about accounting education.

The essential root of the problem is, however, equally illustrated when a "new" issue presents itself to the collective accounting consciousness and begins to claim attention for the accounting agenda. As Gambling and Zeff amongst others have argued, each new issue must be treated ab initio as accountants are, collectively, ill-equipped to derive the principles of their practice from decided, core theory. One such matter which illustrates this is the rapidly increasing consciousness concerning the importance of environmental issues to business, society and, indeed, to accounting.

This paper, whilst it has drawn its primary motivation from the challenge that environmental issues pose for the profession in general and accounting education in particular, has been principally directed towards the wider educational debates in accounting. That is, we have been concerned to explore the philosophical and moral case for placing the environmental at the heart of every aspect of human endeavour, to explore the implications of the widespread pressure for accountants, inter alia, to become environmentally literate and to seek ways in which to advance the range of initiatives which have been designed to give environmental issues a much greater profile in, in particular, professional and business education. (In the UK, the key such initiatives are the Toyné Report and the HE21 project). However, the paper has been more especially concerned to employ the environmental debate to ask questions about accounting and about education and, in doing so, to recognise that the sort of analysis we have attempted here could have been equally undertaken from the starting point of other emerging and challenging points of view.

Only When It Is Possible To Careful Consider Such Profound Challenges As That Offered By Sustainability In Our Teaching, Research And, Most Especially, In Our Dialogue About The Nature Of The Profession And Accounting Education Can We Begin To Believe That Accounting Is An Informed, Educated And 'Learned' Profession. Our Analysis Suggests That Whilst There Are Some Few To Whom Such Concerns Are Both Apparent And Understood, We Have A Very Long Way To Go Indeed Before Such Capacity Is An Integral Part Of What It Is To Be An "Accountant".

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whilst a case can be made, based upon the pristine liberal economic democratic assumptions which underpin neo-classical economics, that serving clients and the public interest are in harmony, the case is not one which the profession ever puts (as far as we are aware) and it is a case with no empirical content.

"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..


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".

that is, such alternative forms of accounting are motivated by a desire to change the rules of the game (as Friedman so famously had it) or, if that is too radical a concept, to change the way in which performance - and thus success or failure - in the game is measured .


crudely speaking, sustainability is a state and sustainable development is a process. One useful perspective is that sustainable development is the means by which we move our current means of financial and economic organisation away from un-sustainability. Both terms are suffering from capture in, especially, the business literature (see, especially, Bebbington and Thomson, 1996) in which we see terms like "sustainable business" to mean business continuing for the foreseeable future assuming (typically implicitly) that environmental and social issues are not in crisis.

the "triple bottom line" is a phrase coined by John Elkington of SustainAbility Ltd and captures the idea that a sustainable organisation would be performing across the three dimensions of financial, social and environmental activity. A first step towards this is the production of Annual Reports which gives equal weight to financial, social and environmental reporting.


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.

Two examples will suffice here. The first is that in our present society the very idea of economic growth was (until very recently) an unchallenging 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 it be expected that a nation would become 'capitalist', but it was also the case that a movement, 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.

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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 influence (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, (1990); Boundieu (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).


see also, in medicine: Abrahamson, (1978); Anon, (1997); Miles et al., (1989); Parker, (1985); in engineering: Koehm, (1991); Lowe, (1991); and comparatively: Paolillo and Estes, (1982); for other examples

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". The most apparently successful example of this comes from the engineering profession where a series of formal initiatives - ranging from research initiatives, changes to syllabi and the appointment of visiting academics to explore the longer term issues of sustainability have achieved notable levels of change. It still is not clear that the exigencies of sustainability are much closer to being embraced throughout the profession however.

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The disciplines we explored in particular were medicine, law, architecture, management and engineering. See Paisey and Paisey (1998) and McPhail (1998) for useful introductions to these matters.

For illustrations of this see, for example, Tanel (1994); De Freis (1994) and Duffel (1995 for engineering and see, for example, Roome (1994; 1998), Forum for the Future (1999), Davila (1991) and Brown and Cortese (1998) for business and management. The issues examined there contrast starkly with the sort of educational agendas which sustainability may demand - see especially Sterling (1996) and Sterling and Huckle (1996).


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 - see, for example, Paisey and Paisey (1998), McPhail, (1998) and Paolillo and Estes (1982). However, with the possible exception of medicine, our work for this project 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 project. 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.


This issue of practitioners' views about and expectations of accounting graduates is explored below.

See, for example, Melancon, (1998); Patten and Williams, (1990); Leong and Wagner, (1990); as well as the material from the professional bodies


Typically meaning here the RAE (UK's Research Assessment Exercise) and, to a lesser extent the TQA (the UK's Teaching Quality Assurance) process.


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.

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.

A senior staff member of one of the professional bodies wished that environmental issues be part of the history of the debates over accounting education. See ACCA (1993), Pizzev (1998); Smith and Lambell (1997).