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Sustainability Accounting and Education: Conflicts and Possibilities

Rob Gray

Introduction

The accounting literature has a long engagement and concern with educational issues: not least because of the critical tensions that seem inevitable in any approach to studying accounting. These tensions arise as a consequence of accounting's *apparently* procedural, technical and "neutral" nature, which is so frequently reinforced through an emphasis on rote learning, on getting answers "correct" and, broadly, in not encouraging a questioning approach to the subject (Lucas 2000; McPhail 2004; Thomson and Bebbington 2004, 2005). In more recent years, these tensions have been thrown into relief as a result of pedagogic studies, which have found that accounting students are inclined to emphasise shallow rather than deep learning (Gray et al. 1994; Thomson and Bebbington 2004).[1] These concerns are especially acute when matters such as ethics, social responsibility, social and environmental accounting and, now, sustainability have been brought to the accounting curriculum. Such topics

R. Gray (✉)
University of St Andrews, St Andrews, Fife, UK
e-mail: rhg1@st-andrews.ac.uk

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have not only struggled to find any place in the central accounting curriculum but have experienced degrees of resistance from educators and students alike as their often personal and challenging nature appears to sit so uncomfortably with normal conventions of accounting and its educational mores (see, e.g., Deegan 2016; Collison et al. 2014). After all, for many, education is not just about dispensing knowledge in a didactic fashion, it is much more about helping us understand who we are and how we should conduct ourselves in society (Thomson and Bebbington 2005, 508).

This short chapter will introduce a few of the key issues that have arisen when seeking to bring sustainability to the accounting classroom and although there are many ways in which aspects of sustainability might be introduced to the curriculum, I will argue that the fundamental questions relate to what you—as a teacher and/or student—believe to be the purpose of education (in accounting as elsewhere) and the extent to which education *must* carefully consider the implications of the very different conceptions of what sustainability actually means.

The chapter comprises four sections following this introduction. The section entitled "What is Accounting and Its Limits" looks broadly at accounting education, whilst "What Are We Actually Talking About?" explores differences in beliefs about sustainability and the very fundamental implications which these different beliefs have on how we approach accounting and its education. The section entitled "Sustainability Accounting?" then looks at what is meant by "sustainability accounting" and the final section, "Education", concludes with reflections upon the education process itself.

What Is Accounting and Its Limits?

At its simplest, accounting is typically seen as a series of integrated processes by which organisational activity is captured and then represented by financial numbers: which numbers are then subject to adjustment and consolidation in order to produce comprehensive financial summaries through which intelligent and informed persons—typically managers and investors—might make sensible economic decisions. These processes,

adjustments and summaries are complex, numerous, intricate and often obscure and, without question, learning and applying these is undeniably demanding. Consequently accounting "education"—or more accurately "training"—can so frequently be entirely absorbed by this (undoubtedly important) detail and minutiae. But, this is not the whole story by any means. Accounting does not just describe events such as assets or profit; it creates them: in a crude sense they often do not exist until accounting recognises them (Hines 1988). Equally, accounting may appear to be a technology—a series of techniques—but it is a technology with considerable layers of ethics and political judgement embodied in it (McPhail 1999). Furthermore, the consequences of accounting are by no means simply economic—they are also social and environmental and stretch well beyond the conventional boundaries of the accounting entity (Gray et al. 2014). As if this were not enough, the techniques, their application and their justification are not always coherently articulated: at their worst they simply do not make sense and at their best they are open to manipulation, misunderstanding and mistake (Tinker 1985; Gambling 1978). And finally, the elephant in the room, believe it or not, is the question "what is (and by implication what is not) accounting?" This is a far from obvious question and whilst professional examinations and the predominant views of the accounting firms' clients are typically accepted as defining what accounting is, this is very highly contestable. In essence, accounting is whatever one decides it *should* be (Hines 1988; Gray and Collison 2002; Hopwood 2007) and what it *should* be is heatedly contested by "those in power, those seeking power and those opposing power" (Thomson and Bebbington 2004, 610).

In these circumstances, it is easy to see why there might be so many areas of potential conflict within education in accounting. Is the educators' duty to train the student or to develop independent enquiry? Is it appropriate to expose the ethical and political layers embedded in accounting? And what should one do when students find that their personal values conflict with the tenets and principles of accounting? How far should educators go in challenging the taken-for-granted assumptions about the limits of accounting? To what extent do accountants need to be equipped with the capacity to handle ethical matters and embrace—or at least critically assess—innovations? and so on (see e.g., Gray et al. 1994;

Lucas 2000; McPhail 1999, 2001, 2004). The challenge here is that whilst we might argue that a "good" education should encourage students to embrace different and conflicting points of view (Coulson and Thomson 2006), there is often little or no room for such difference in the classroom and such difference can be an anathema within professional examination and practice (Lee 1990).

One might have thought that there was room for such cognitive dissonance—even a requirement for such difference—in university accounting education. And yet, despite the very obvious inter-connectedness between social, ethical and environmental (notably sustainability) issues and accounting, there remains clear evidence that such matters are simply not entering mainstream accounting education (Deegan 2016; Humphrey et al. 1996; Gray and Collison 2002; Collison et al. 2014).

There are a range of reasons mooted in the literature as why this might be. First, there is the assertion that such matters are "not accounting": for whatever reason teachers, students and practitioners often have fairly fixed views as to what accounting is and is not. Why would one teach subjects not relevant to the curriculum? Second, in a number of related arguments, teachers observe that (i) there is more than enough in a conventional curriculum to keep one fully occupied; and/or (ii) of all the potential new (or peripheral) matters, why privilege issues such as sustainability?; and/or (iii) why introduce new material on which the teacher has little or no prior knowledge and diminish the areas of tuition in which they are relatively adept? (see, e.g., Gray et al. 2001)

These arguments, which derive, on the whole, from innate conservatism and self-disciplining amongst academics, can often find justification and support from the observation that "such matters" are being handled elsewhere. Whether it be a course in business ethics, environmental law, corporate social responsibility (CSR) or sustainability and society (e.g.), a conscientious teacher can legitimately infer that the students are getting the breadth needed elsewhere in the programme. Such views are by no means limited to accounting (Gray et al. 2001).

Perhaps the most rigorous explanation for accounting's resistance to these areas of "novelty" was initiated by Tom Lee (1990) and Fenton Robb (1989). They developed the argument that accounting acted as an autopoietic system which, essentially, embraced and absorbed those ideas

which "coded" to its central architecture and rejected those which did not. In essence, if a notion fitted into existing accounting mores, the idea could be accepted; if it did not, it was rejected by the discipline. This argument has been developed in the literature (Power 1992). It has persuasive logic—even if it has proved difficult to substantiate empirically. Autopoiesis has certainly been useful in articulating many of the difficulties that have faced attempts to introduce sustainability into the accounting curriculum (Lawrence et al. 2013; Khan and Gray 2016) and it can easily be seen to encompass the more prosaic and conservative arguments we saw earlier.

There is now a considerable literature demonstrating the important reflexive relationship that accounting has with ethics, environment, society, justice, sustainability and so on (Gray et al. 2014; Bebbington et al. 2014). Whilst accounting may wish to avoid a consideration of life-threatening issues such as sustainability, it is more and more difficult to justify such a position (ICAEW 2004; Hopwood et al. 2010). And yet, there is more than enough evidence to suggest that accounting education continues to ignore sustainability. A simple observation of the number of courses within an accounting degree or professional education which do not mention it and/or the number of graduate accounting students who would not have met the notion in their studies is arguably evidence enough. It suggests that accounting can be thought to continue to act autopoietically, regardless of the critical and potentially life-threatening nature of the issues.

Only when we have some substantial understanding of this resistance might we begin to consider how sustainability could be embedded into the accounting curriculum. From a practical point of view, there is little value in innovative and exciting suggestions for sustainability education if those ideas are simply going to be ignored, rejected or, even, scorned.

What Are We Actually Talking About?

The context in which we might consider the inter-twining of sustainability and education is well summarised by Deegan (2016, 65–66). Essentially, despite 30 years of wide-ranging, often global initiatives, the

inequalities of humanity and the desecration of the planet simply keep on getting worse. There is no longer much doubt that international financial capitalism, financial markets, corporations and accounting are all inescapably implicated in this situation.

What remains unclear—or, at least unresolved—is whether the *problematique* represented by un-sustainability can be resolved by humankind's current systems of organisation (international financial markets, profit, growth, corporations, etc.) or whether un-sustainability is actually the *result* of these very systems. At the risk of simplifying somewhat, the literature identifies the former view with something called "weak" sustainability and the latter point of view with what it calls "strong" sustainability. This distinction matters—and matters acutely in accounting and related business and economic studies. Crudely, if weak sustainability holds, then our existing systems of management and accounting may need tweaking and adjustment, but they can be considered essentially sound. If strong sustainability holds, then there is a very good chance that only through a drastic uprooting and fundamental surgery of our taken-for-granted systems might humanity manage to approach anything that looks like a sustainable future. Under strong sustainability, it is not at all obvious that anything we currently recognise as accounting, business, growth, profit or finance might be able to exist. That is a truly daunting prospect. It is one that many observers seem unable to accept (Hamilton 2010).

It is in this context that we now begin to see why questioning the very nature of education becomes so very important if we are to sensibly address sustainability. If one subscribes to the views of (e.g.) Thomson and Bebbington, then, at a minimum, one must look to education to help students—and subsequent practitioners—understand the differing points of view; to help them interrogate the arguments and evidence of the different world views (Spangenberg 2017); and to encourage and support them in coming to a (however tentative) conclusion. It is difficult to conclude that this is happening currently. It is as though accounting (and business and management education) is proving to be autopoietic and consequently only able to embrace the less drastic notions of sustainability—is only able to embrace the implications of a weak sustainability. Dyball and Thomson (2013) argue that accounting education

for sustainability must extend beyond weak sustainability and it must recognise the possibilities of major social and economic transformations (303–304). Education crucially helps us to frame the issues (see, e.g., Longman 2015) and helps us to assess whether "our intellectual commitments are justified" (Thomson and Bebbington 2005, 511).

As far as one can tell, there seems to have been more exploration of how management and business education is responding to sustainability than there has in accounting. The management surveys are telling. For example, Landrum and Ohsowski (2017) find that the emphasis in sustainability in management education is on the weak form: the form which does not challenge existing models of business and management practice (Gray 2013). Isil and Hernke (2017) come to the same conclusion and argue that weak sustainability dominates in management education—in a manner which offers no challenge to conventional management thinking. And Cullen (2017) argues that there is a tendency to muddle ideas of sustainability with notions such as social responsibility or ethics and to rather miss the point of sustainability education. Indeed, Cullen argues, attempts to implement any sustainability education really require a broader systemic change within mindsets and the curriculum. My experience suggests that there is no reason not to generalise these views across to accounting (Gray et al. 2001; Collison et al. 2014).

The challenge to introduce a richer notion of sustainability into a possibly autopoietic system like accounting is considerable. History does not favour a positive outcome. Indeed, major attempts in the UK to develop environmental awareness throughout the curriculum—most notably the Toyne Report and HE21 in the 1990s—are remarkable in the minimal observable effect they had on disciplines (see, e.g., Gray et al. 2001; Gray and Collison 2002; Collison et al. 2014).

So, unless one is going to seek to fundamentally challenge the existing mores of accounting (and business) and actively seek to change mindsets and worldviews (Spangenberg 2017; Cullen 2017), education is going to either ignore sustainability altogether or only consider the weakest forms of sustainability (much as it seems to do now).

There is, however, some serious challenge to this rather stark binary choice.

There appears to be a growing awareness that the exigencies associated with strong sustainability are actually rather terrifying and something that many people in the modern world actually find unthinkable (Hamilton 2010; Marshall 2014; Adams 2015). Briefly, it seems that contemplation of strong sustainability can challenge an individual's sense of self and their place in society; it can instil sensations of hopelessness and futility and can set up seriously dysfunctional cognitive dissonance (see also Landrum and Ohsowski 2017). It may well be that an initial purpose of sustainability education is to help educators overcome such ennui and, possibly, that a major purpose of any education is to increase the potential to handle cognitive dissonance.

A more pragmatic approach is counselled by Stefan Schaltegger who, explicitly aware of the futility of counsels of despair, focuses exclusively on the positive messages of what might be—or indeed can be—achieved (Schaltegger et al. 2017). This is a project to "open up new spaces" as Baker and Schaltegger (2015) argue. So, for example, Etxeberria et al. (2017) take an explicitly corporate point of view and explore what new accountings might move the organisation closer to a sustainable direction. In doing so, they neatly side-step the unresolved conundrum as to whether they are simply adopting a weak sustainability position (which they would deny) or adopting an iterative and pragmatic approach to discovering strong sustainability through current possibilities and practices. The attractions of this sort of approach are very clear: whether they can or will deliver anything as radical as strong sustainability remains unresolved.

Sustainability Accounting?

If there are disagreements concerning the nature of sustainability and if the question of what is (or what is not) "accounting" is contestable, it will come as no surprise to learn that there is a considerable range of different things which find themselves labelled "sustainability accounting". This is not the place to review this range of possible "sustainability accountings" (but, see, e.g., Gray et al. 2014): all we can do is provide a brief idea of what this "accounting for sustainababble"[2] might look like.

In very simple terms, we might think of there being three very broad approaches to "sustainability accounting": those which fit relatively neatly into extant accounting practices (and extant accounting courses); those which take current accounting methods and practices and extend them in order to turn the ideas back onto themselves; and those approaches which try and capture a more holistic sense of sustainability which may, or more usually may not, find expression in the conventional accounting entity. These categories are intended simply to be illustrative and are certainly neither complete nor discrete.

Extant Accounting

There is little or no problem for accounting and for accounting education with the first of these approaches: in essence, some of the elements of ideas associated with sustainability are simply inserted into existing notions and programmes. So, management accounting has long recognised the notion of efficiency and the need to support management decisions: the integration of environmental management, investment appraisal for environmental risk and the pursuit of "eco-efficiency" (see, e.g., Gray et al. 2014, 172) is relatively straightforward (see, e.g., Collins et al. 2011). Similarly, financial accounting is not especially challenged by either recognising environmental liabilities arising from (say) polluted land or considering the limited disclosure requirements concerning employees, environment or human rights issues, for example. Even the relatively lukewarm contemplation of "integrated reporting" (see, e.g., Thomson 2015) has hardly had a seismic impact on financial accounting (although the "capitals" framework might change this—see later). Equally, in finance, as Deegan (2016) notes, sustainability can be considered as just another risk or niche variable.

Extending Accounting Possibilities

More disruption is promised—in principle at least—when long-established components of accounting are re-interpreted and/or expanded

in an attempt to capture more than the immediately economic impacts of the organisation. We might see three broad themes here.

The first theme is, arguably, the Stefan Schaltegger project of exploring innovative ways in which management accounting (in particular) might embrace a longer-term perspective, planetary boundaries or, for example, the sustainable development goals (Schaltegger et al. 2016; Etxeberria et al. 2017). This approach stays within accounting but seeks to cajole the organisation into more interesting and less un-sustainable waters.

The second theme re-addresses "capital". Capital is a crucial notion in conventional accounting and maintaining organisational capital intact is one of its few immutable desiderata. How might accounting be extended to incorporate not just economic capital but social and environmental capital as well? Then one can use accounting, in theory at least, to ask the question whether the organisation of interest to us contributes to, maintains or destroys economic, social and environmental capital: a useful first approximation of the organisation's potential "sustainability". Something called "full cost accounting" was amongst the first attempts at this idea and sought ways of internalising (at least theoretically) the different external costs imposed by economic activity on society and the environment (see Bebbington et al. 2001 for a summary of these ideas). Full cost accounting overlaps with an idea known as "sustainable cost" which asks the question "what would the organisation have had to spend if it had maintained environmental capital during an accounting period?" (Gray 1992; Bebbington and Gray 2001). Neither of these approaches has found much enthusiasm within the accounting profession or companies themselves—almost certainly because they show (suggest?) that, in all probability, current companies are significantly un-sustainable.[3] Somewhat more enthusiasm was shown for variations on these themes which were developed through Forum for the Future (Howes 2004), the Prince of Wales "Accounting for Sustainability" project (Hopwood et al. 2010) and the "multiple capitals project" (Coulson et al. 2015). All of these sought to use elements of the idea of different capitals but in a manner more sympathetic to corporate interests and, perhaps more significantly, in a way which weighted economic contributions and certain social contributions (like employment) over other detriments like inequality and environmental degradation.

The third of these themes is perhaps the most widely recognised initiative around corporate sustainability: John Elkington's "Triple Bottom Line" sought to recognise that a sustainable organisation needed to be performing socially and environmentally as well financially (Elkington 1997). That is, an organisation needed to recognise (and report upon) its social and environmental performance alongside its financial performance. This basic idea has been institutionalised—albeit at a fairly undemanding level—in the Global Reporting Initiative (GRI), which has been moderately successful in encouraging a significant minority of large companies to voluntarily adopt some elements of these three components of disclosure (Buhr et al. 2014).

It seems likely that each of these themes could take us closer to what an "accounting for sustainability" might actually look like but it is highly contestable whether the current practice in any of these areas actually tells one anything at all about whether or not the organisation has contributed to or detracted from its own un-sustainability (Milne and Gray 2013). It is not insignificant to note that, as Thomson and Bebbington (2004) tell us, it is not *what* you teach but *how* you teach it. Each of these methods can be subsumed within a weak sustainability framework and can be treated as if it were compatible with current means of organising. Or they can be used to expose a strong sustainability point of view which radically challenges the extant practice. It depends not so much on the vehicle we use as the person who is steering it.

Addressing Sustainability Directly

The difference between the forgoing approaches and addressing sustainability directly is the level of resolution we bring to the analysis. The foregoing suggestions all have two basic characteristics in common. First, they each take the organisation as the accounting entity and even when willing to soften those boundaries still have the entity at the heart of the accounting when, in fact, neither society nor ecology is organised in the same way as corporations. The second characteristic they share is that they take, to a greater or lesser extent, the conventional ideas of accounting, finance and business and attempt to shoe-horn notions of

sustainability into them. The notions are basically incompatible: *ecology and society simply have no place in conventional accounting and are much, much larger concepts*. Even expanding the notions can run the risk of still (often unconsciously) adopting the taken-for-granted assumptions. This conundrum is reflected at its most basic in the contrasting questions: do we take accounting, management and corporations and ask "how can they contribute to sustainability"? Or do we take society and ecology as our starting point and ask "what must be done to approach sustainability?" The first takes corporations and accounting as essential to our discussion; the second allows for the possibility that accounting and corporations may be the problem and any answer may decide that we need no accounting or corporations—at least as we currently know them (Milne et al. 2009; Russell et al. 2017).

Approaching accounting for sustainability with this frame of mind is necessarily more speculative for at least two reasons. First, organisations are, perhaps understandably, reluctant to engage with methods which might challenge the organisation's very existence (and, incidentally, expose the vacuity of many of their claims about sustainability and social responsibility). Consequently, the practicability of the methods is unlikely to have been tested. Second, there are the problems of collating data and crossing disciplinary boundaries to offer new forms of accounting that adopt different perspectives (Lewis and Russell 2011; Christ and Burritt 2017). Despite these difficulties, perhaps the most promising initiatives in this area have involved the employment of the notion of ecological footprints to measure, in effect, the amount of planetary space that individuals, nations and organisations use. Ecological footprints offer amongst the most persuasive evidence that mankind's ways of organising are far from sustainable (see, e.g., Gray 2006), but data at the organisation level is not currently available. Similar experiments with "social footprints" have also been explored (Thomas and McElroy 2016).

Other approaches have included direct attempts to re-configure organisational boundaries (see, e.g., Antonini and Larrinaga 2017). There is also a considerable movement to de-centre the (social and/or environmental) accounting through what are typically known as external social audits (Thomson et al. 2015). And in innovative and challenging developments, there is a growing experimentation with both accounts of social issues

(Cooper et al. 2005) and accounts of both species and extinction (Jones and Solomon 2013).

So, it is obvious, even from this briefest of reviews, that there is a considerable diversity within "accounting for sustainability". The very diversity can be a very encouraging sign (as our modern minds struggle with this most bewildering of concepts, Gray 2010) but, simultaneously, it is so very important to keep one's eye on the issues of planetary and societal sustainability. This array of different approaches could be in danger of occasionally obscuring the central point and allowing a student (or teacher or practitioner) to become distracted by the elegance and detail of the form over the function.

Education

Hopefully this short essay has illustrated that what comprises education for accounting and sustainability is unlikely to be ever adequately covered by a single—or a simple—approach to the subject (Brown 2009; Deegan 2016). Hence, the importance of one's beliefs about the nature of education. I share with many the commitment that education cannot ever be about single, didactic notions. Our primary task is, I believe (I stress "believe" as this is not a fact or a provable position), to embrace what John Keats called "negative capability", which might be paraphrased as "*believing strongly in X whilst accepting, without reservation that not-X may be the case*". It is a notion which does not deny the role of belief but embraces the notion that all knowledge, belief and facts are conditional. That is, as Brown (2009, 308) suggests, accounting education should not be about seeking out and inculcating definite "truths" and single "correct" accountings around sustainability, but rather it must be about the facilitation and broadening of debate. By this means, we are constantly challenged to *change our mind*. This is at least as much a challenge to the "teacher" as it is to the "student". Different folk will come to different conclusions, but any conclusion should only be acceptable if it is arrived at for transparent reasons and/or that the values that underpin the conclusion are clearly articulated (Tinker and Gray 2003). My central contention is that, as far as I can see, the current situation in accounting

education falls some considerable way short of this ideal. A lecturer in financial accounting, for example, is unlikely to be willing to have the core themes of the course challenged and exposed—if only for reasons of time and space. But an educational approach based on negative capability would encourage careful examination of taken-for-granted assumptions on growth, corporations, capital, capitalism, finance, financial markets, monetarisation, accounting entity boundaries, consumption and so on. It would be profoundly disruptive and disturbing.

At least part of the problem is psychological as we have seen: difficulty in coping with notions which seem to challenge one's taken-for-granted assumptions and which require one to explicitly handle cognitive dissonance (see, e.g., Hamilton 2010).[4] It seems to me that education is failing—and possibly even worthless—if it cannot help an individual address conflicting and difficult notions: otherwise what is education for?

So, it is hopefully obvious that the only approach I can see for an education for accounting and sustainability that makes any sense lies in embracing a multitude of approaches which challenge how we teach, rather than what we teach (Coulson and Thomson 2006; Dyball and Thomson 2013; Thomson and Bebbington 2004, 2005; Lucas 2000; Brown 2009). Challenge, conflict and analysis become the *sine qua non* of the classroom (Gray et al. 2014, 325–327; Collison et al. 2014).

This is not to say, though, that either there are no "facts" to be shared (e.g., levels of species extinction; levels of inequality, ecological footprints), nor are there no arguments that need to be deconstructed (Does accounting serve the public interest? Is growth essential? What are the strengths and weaknesses of international financial capitalism?). Equally, our selection of approaches will always reflect our own preferences and beliefs. Education is never neutral, nor should it be so. It might approach an open-mindedness and an even-handedness though. Such an approach might encourage students to actively challenge the teacher whilst equipping the student with capacities for research and argument. I would seriously maintain that humility on the part of both student and teacher is crucial: opinions need substance behind them. We must recognise that we may simply not know enough about an issue; we may simply not have spent enough time in thinking about and analysing an issue to have a view worthy of attention (even if that view is to ignore sustainability).

I tend to believe that largely un-informed opinions may actually be valueless.

What seems clear, however, is that the treatment of sustainability and the challenging nature of education should not sit in specialised electives where the bulk of students can ignore it and where the challenge to the core of accounting is isolated (Gray and Collison 2002). Whilst new issues might, very properly, be experimented with in minor electives, it is only when sustainability sits at the core of mainstream classes and disrupts them accordingly that we might begin to see that we are genuinely educating accountants for sustainability.

Guidance on specifically how to approach such a challenge exists in the literature (although, arguably, each teacher needs to develop their own unique embracing of the challenge). Perhaps the most widely suggested approach is the employment of *dialogics* associated most vividly with the work of Ian Thomson and Judy Brown (see the references). Their attachment to democratic principles leads them to adopt an approach which seeks to empower students and to break down the traditional teacher/student relationship.

To the extent that there is any collective view on the subject, teachers are well-advised to look carefully at the dialogics approach—but that does necessarily exclude consideration of other initiatives. We have seen how many academics would encourage the introduction of sustainability-related notions into the core curriculum without, necessarily, disrupting the core technologies (Schaltegger et al. 2017; Collins et al. 2011), whilst others might encourage students to explore and imagine new accountings in a range of different settings (Coulson and Thomson 2006; Collison et al. 2014). We also should not ignore ideas from other disciplines (see, e.g., Sidiropoulos 2014; Cullen 2017; Landrum and Ohsowski 2017; Andersson and Öhman 2016).

My own preferred approach is predicated upon the assumption that if you understand sustainability, it stops you from sleeping at night (Gray 2013): sustainability is a profoundly disruptive notion. It is important to stress, though, that as an educator, I see my duty as allowing students the opportunities to commit to (say) weak sustainability or even (say) to extreme forms of liberalism *but only* if they have addressed and can seriously address the weight of evidence and argument that a strong

sustainability position would demand. Of course, the opposite is also true: everyone committing to a deep ecologist position equally must be subject to a deliberate pounding of arguments from, *inter alia*, an undiluted free-market finance specialist.

I sought to achieve this in a module I ran for a number of years—latterly at the University of St Andrews—and I tried to summarise the thinking that went into the course and the experience of living with such a course in a piece in *Accounting Education: An International Journal* (Gray 2013). The basic lecture outline is shown in the following text box: a structure obviously based on Gray et al. (2014). However, the list itself is rather bland and uninspiring. It only makes sense (to me at least) when the other issues in the course are wrapped around it (Gray 2013). The subtext of the module was "Helping students come to a well-informed view about the relationship between business, accounting and society". This is not obvious from the lecture list and this rather emphasises the point that it matters less what you teach than how you go about "teaching" it.

A Lecture Course for Sustainability Topics

1. Overview of business, society, sustainability, accountability and responsibility
2. Systems thinking, liberal democracy and social accounting
3. Accountability, neo-pluralism and theories of organisational accountability
4. Social responsibility and sustainability
5. Profit and responsibility: conflict or harmony?
6. Social, environmental and "sustainability" reporting
7. Environmental management and "win-win"
8. Socially responsible investment?
9. External social audits
10. The practice and theory of discharging social, environmental and sustainability accountability
11. Practical options for the future?

My personal belief remains that if sustainability fits into the curriculum, it is not sustainability but rather a form of sustainababble comprising some gentle mix of environmental management and CSR-lite. It is

not at all clear that such a commitment tells us anything at all about sustainability. Sustainability challenges everything about modernity—at least in principle—and so an absence of disruption and an absence of cognitive dissonance suggest to me an absence of sustainability.

Education in accounting, as elsewhere, should, I believe, be dedicated to high degrees of disruption, cognitive dissonance and discomfort. When we embrace sustainability, I am unable to see any value in any other approach.

Notes

1. Shallow or surface learning emphasises memory, regurgitation and passivity; deep learning emphasises understanding, engagement and critical analysis (Gray et al. 1994).
2. "Sustainababble" was a colourful and illustrative term coined by Engelman (2013) to capture the range of chatter around what purported to be sustainability which, largely, failed to ever address sustainability itself.
3. Which is probably the correct answer (Gray 1992, 2010).
4. Gray et al. (2001) report an interview with an academic who stated, "I am aware of sustainability but it is scary…".

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