Sustainability and Ethics: Graduate Dispositions in Business Education

Peter Petocz (Corresponding author)
Department of Statistics, Macquarie University
North Ryde, NSW 2109, Australia
Tel: 61-2-9850-9174 E-mail: Peter.Petocz@mq.edu.au

Peter Dixon
Faculty of Business, University of Tasmania
Launceston, TAS 7250, Australia
Tel: 61-3-6324-3329 E-mail: Peter.Dixon@utas.edu.au

Received: February 3, 2011 Accepted: February 23, 2011 doi:10.5539/ass.v7n4p18

Support for this project was provided by the Australian Learning and Teaching Council, an initiative of the Australian Government Department of Education, Employment and Workplace Relations. The views expressed in this paper do not necessarily reflect the views of the Australian Learning and Teaching Council Ltd.

Abstract

In this paper we investigate sustainability and ethics as graduate dispositions for students of business in the early 21st century. We base our theoretical position on recent research investigating students' and lecturers' conceptions of sustainability and ethics. We apply this to the practical pedagogical problem of helping students to engage with the notions of sustainability and ethics in their business classes. In this, we use our recent experiences with a project investigating the development and embedding of graduate skills in the business curriculum and, more specifically, with a three-day workshop for business students run by our team during the course of this project. We draw conclusions about dispositional learning and suggest practical ways in which this can be advanced.

Keywords: Sustainability, Ethics, Graduate attributes, Dispositions

1. Introduction

During the course of their university life, students of business will expect to learn discipline-specific substantive content about the particular areas of business that they are studying. Additionally, and maybe very early in their course, they will come across a range of generic skills or attributes, which many universities now list as desirable and thus consider explicitly in the design of their curricula. These include actual skills such as teamwork and critical thinking, and also those such as sustainability and ethics, better described as dispositions. As opposed to the skills mentioned previously, these dispositions represent approaches towards academic and professional work, or a specific "orientation to engage with the world in some way" (Barnett, 2007, p. 102). A student does not *learn* sustainability or ethics, nor can they be "taught", though they might learn about some aspects of them: rather, a student's view of the world is expanded by considering business problems from viewpoints that include them (Reid *et al*., 2011). Thus, the educative task is to expose students to a range of activities where these dispositions can be observed, experienced and practised.

We are currently in the second half of the United Nations Decade of Education for Sustainable Development (2005–2014). The goal of this initiative is "to integrate the principles, values and practices of sustainable development into all aspects of education and learning", by utilising a continuing educational effort to, "encourage changes in behaviour that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations." (UNESCO, 2005, p. 6) Back in 2002,

in proposing the Decade of Education for Sustainable Development (DESD), the participants at the Johannesburg Earth Summit made it clear that sustainable development should be located in all educational and disciplinary domains, through statements (United Nations, 2002) such as: "education is critical for promoting sustainable development" (article 116, p. 61); and their recommendation to "integrate sustainable development into educational systems at all levels of education in order to promote education as a key agent for change." (article 121, p. 61).

However, sustainability has been perceived until quite recently as the domain of environmental educators. The process of moving sustainability to a more central position in university studies, particularly in business, has been a long and so far incomplete affair (Anderberg, Norden, & Hansson, 2009), despite the inclusion of sustainability on lists of "graduate capabilities" at some universities and the inclusion of sustainability-related units in many MBA programs. Perhaps in response to such problems, the *UN Decade of Education for Sustainable Development* website has recently added more detail (UNESCO, 2010): "The DESD breaks down the traditional education scheme and promotes: interdisciplinary and holistic learning rather than subject-based learning; values-based learning; critical thinking rather than memorizing; multi-method approaches – word, art, drama, debate, etc.; participatory decision-making; locally relevant information, rather than national."

Some novel pedagogical approaches to sustainability have been successfully implemented. For instance, Stubbs and Cocklin (2007) describe a "corporate sustainability" unit in the MBA at Monash University, Australia. The unit examines sustainability from the viewpoints of "ecocentrism, ecological modernization and the neo-classical economic paradigm" (p. 208), challenging students to broaden their perspectives, critique the approaches of different organisations, and develop a personal approach to sustainability in their careers and lives. Despite their successes, the authors identify a need to integrate sustainability into core units of their MBA in order to provide stronger links with students' central business studies.

By contrast to sustainability, the need to include ethics in the education of a business professional has been more widely accepted, particularly after widespread reporting of examples of business behaviour around the recent "Global Financial Crisis" (and earlier incidents). It may be that some of the causes of accounting scandals and business collapses can be traced to deficiencies in business education. Certainly, there is continuing debate about how best to help business students engage with the ethical aspects of their future profession. Should there be classes in ethics, or should ethics be addressed in a variety of subjects? What should be taught in such classes? Will it have any effect on students' views or their future behaviour? Two decades ago, the American Accounting Association published its well-known casebook of ethical studies (May, 1990), and since then there has been regular discussion in the business literature about pedagogical aspects of ethics education.

Ethics theorists suggest that there are different ways of considering ethics in the context of business. At the most basic level is the distinction between *universalist* views that maintain that people are essentially the same despite their different backgrounds and contexts, and hence have an innate understanding of ethical behaviour. An alternative view is the *relativist*, maintaining that people have essential differences in culture, religion, ways of thinking and so on that will influence their understanding of ethics, and that the fundamental goal of ethical behaviour is to cause the least amount of harm. From the pedagogical point of view, these differences indicate that exposure to diverse ways of ethical thinking, maybe as case studies or role plays for critique, is an important aspect of learning.

Some argue that ethics cannot be taught, and in consequence exposure to ethical thinking has no place in the business curriculum (McDonald, 2004). Be that as it may, there appear to be two main approaches to the teaching of ethics in a business curriculum. The first involves a concentrated exposure to the discipline, usually in a one-semester course. The other approach seeks to embed ethical thinking into a business curriculum. The latter approach has as its aim development of the student's ability to recognise in the context of discipline studies the difference between ethical management and the management of ethics in organisations (Boatright, 2003). The debate around which approaches to ethics education are most efficient will continue. However, the more effective approaches seem likely to be based on students' own ideas about ethics and its role in their future professional lives.

Our project, "Embedding the development and grading of generic skills into the business curriculum" (Vu, Rigby, & Mather, 2011), was designed to investigate ways of enhancing business students' engagement with graduate skills in a manner that is professionally relevant for them, and to develop a range of learning materials that could assist this process. Four aspects were selected for attention: teamwork and critical thinking – which could be described as 'skills' – and sustainability and ethics – which are better labelled 'dispositions'. It is these dispositions which are the focus of this paper, and the two following sections examine the previous research on which we based our theoretical approach to sustainability and ethics.

2. Conceptions of sustainability

The theoretical basis of the sustainability component of our project was previous research into students' and lecturers' views of sustainability (Reid, Petocz, & Taylor, 2009; Reid & Petocz, 2006), carried out using a series of interviews formulated and analysed using a phenomenographic approach (Marton & Booth, 1997). The motivation for this research was the simple observation that when we talk to students or colleagues about sustainability or sustainable development, we find that they have a range of ideas about the meaning of these words, and of the concepts behind them. Any attempt to integrate sustainability into business (or other) education needs to take account of the different ways that participants view sustainability.

The results of the phenomenographic research indicate that students (and lecturers) view sustainability in three qualitatively distinct ways, and these three conceptions of sustainability can be arranged in a hierarchy from narrowest to broadest.

Distance – sustainability is approached via a definition (maybe a dictionary definition of "keeping something going") but essentially to keep the concept at a distance and avoid engagement with it.

Resources – sustainability is approached by focusing on various resources, either material (minerals, water, soil), or biological (fish, crops), or human (minority languages, populations, economies).

Justice – sustainability is approached by focusing on the notion of "fairness" from one generation to the following one, or even within one generation: the idea here is that sustainability can essentially only be achieved under these conditions.

The terms "narrow" and "broad" are used to indicate an inclusivity in the ideas: people who understand sustainability in the sense of *Justice*, can also talk about it in terms of resources, and are aware of the definitional aspects. However, this does not seem to work in the other direction: people who understand sustainability in the *Distance* sense seem not to be aware of the *Resources* or *Justice* viewpoints.

It is useful to look at a few quotes from some of the students we interviewed to exemplify each idea about sustainability (note: all names have been changed for anonymity). Representing the *Distance* view are these statements from Liz and Alex:

> Liz: *Sustainability? Well, if I use the literal translation of the word, sustainability for, to me would mean, yeah, just longevity or something like being able to, sustainability, just being able to, you know, hang in there.*
>
> Alex: *Maybe for employee, being sustainable is just that, you know, staying with the company, and being loyal to the company. Now in the companies a lot of workers you know moving like every two/three years from jobs to job.*

The *Resources* view is apparent in this quote from Erica:

> Erica: *So if you're a company that relies on coal sources for your energy then you can't say that that's a sustainable way of operating because at the end of the day the coal sources are going to run out. So it's not a sustainable way of doing something but if your energy sources are from the sun, then you could say well we, our operations are sustainable because we could practically keep doing this forever because the sun is always going to be, well, you know, you know it's going to be around for at least another million or so years.*

Finally, the *Justice* view is shown in Tim's statement:

> Tim: *Well, again it's, it's going to be very important because essentially, without managing resources optimally, and effectively, and without being able to reuse those resources. I mean, it's one generation that'll benefit and then every generation afterwards will, you know, suffer the consequences, you know, of our greed.*

In some of these quotes we can see evidence of the specific business context in which the students found themselves, but some of the respondents were majoring in other disciplines while studying some business units. We should also remember that at Macquarie University, where the interviews took place, the business faculty represents about one-third of all the students. An interesting aspect of these statements from students is the fact that they show the same range of conceptions as did their lecturers in an earlier series of interviews (Reid & Petocz, 2006). In terms of our goal of introducing the notion of sustainability to university students generally, there seems to be a long way to go with some of them, while others already seem to be well prepared to discuss the ideas in a significant way.

3. Conceptions of ethics

As part of the same project, we interviewed business students about their views of ethics – in particular, how they understood the idea of ethics, and what part they felt ethics would play in their future professional work. The aim was to investigate the range of ideas about the meaning of the word "ethics" and the use of the term in the context of business. Understanding students' conceptions of ethics seems to be an important first step in including ethical aspects in business pedagogy.

Again, we used a phenomenographic approach to analyse the results that we obtained. The results indicate that students' views of ethics can be described by a hierarchy of three conceptions that are qualitatively different and can be arranged from narrowest to broadest (Reid, Taylor, & Petocz, 2011).

Subjective beliefs – at the narrowest level, students talk about ethics in terms of subjective beliefs about right and wrong. Ethics is a personal and naive idea, unexamined in any critical way.

Rules – ethics consists of personal ideas about right and wrong, informed by rules. These rules could come from a variety of origins: students mentioned their family, the Bible, the university, the company they worked for and the laws of the land.

Effect on others – ethics is personal beliefs about right and wrong, informed by rules, and modified by the notion of treating others well, in the way that you yourself would like to be treated. This conception includes an aspect of critical reflection on the effect of one's ethical stance on others.

As in the conceptions of sustainability, the terms "narrow" and "broad" are used to indicate an inclusivity in the ideas, and this is made explicit in the description of the levels. People who understand ethics at the narrowest level seem not to be aware of the broader conceptions.

Here are some quotes from different students representing each idea about ethics. Adam illustrates the *Subjective beliefs* view with a naive and relatively unexamined statement:

> Adam: *Ethics. Ah, that's a very grey area. I'm not sure. I haven't put a lot of thought into it, but I think, I think everyone does behave according to their ethics. I mean, you wouldn't do something if it wasn't, if you don't feel it was right.*

In the next extract, Janine illustrates the *Rules* view, talking about government regulations as a basis for ethical behaviour:

> Janine: *Ethics is the, maybe it's the same thing like moral, moral behaviour. People should comply with the regulation and government policy; if they don't the company will ultimately collapse and people will also be affected. … And the regulation, such as accounting, government has set up lots of accounting standards and every company should, every company have to comply with that.*

Finally, Andy shows the broadest view, *Effect on others*, and identifies a basic problem particularly relevant for business students:

> Andy: *It's all about being fair, right and just. And maybe that's not a good to look at it in business, because business is about making money. It's the bottom line. Or generating wealth creation or however you want to classify it. But the bottom line is if you can go home, if you can go home and look in the mirror, and be happy with yourself about what you're doing, that's fine. And if you're so removed from what you're doing to the rest of the people for career enhancement or whatever, then I don't want to work for you anyway.*

In some of these quotes we can see evidence of the specific business context in which the students found themselves, and particularly of the ethical conflicts that can arise in the business world. While this aspect of the research did not include the views of lecturers, other research has indicated that they may have a similar range of views (Sin, Reid, & Dahlgren, 2009), though of course there will be some business lecturers with more specialised backgrounds in ethics. It is apparent from students' comments that many of them hold naive and uncritical views about ethical aspects of their studies, despite the regular inclusion of ethics as a topic in many courses.

4. The project approach

Our project (Vu, Rigby, & Mather, 2011) sought, amongst other things, to design and test a number of learning and assessment tasks that could be embedded into a business curriculum to develop the dispositions of sustainability and ethics. A similar approach was adopted toward the graduate skills of teamwork and critical thinking.

We decided to utilise an intensive workshop for students facilitated by the academic team members of the project

as a vehicle for testing a range of learning and assessment tasks that we had developed. This three-day workshop was held at Macquarie University in April, 2009, and was attended by a multidisciplinary group of 35 third year students from the business faculties of seven Australian universities. After initial icebreaker exercises (see Kavanagh, Clark-Murphy, & Wood, in this Issue), the students worked in small groups on a variety of activities in order to focus on the chosen graduate skills and dispositions.

Dedicated introductory sessions were devoted to each of the skills in turn – teamwork and critical thinking – and the dispositions – sustainability and ethics. These last two sessions included an introduction to ideas of sustainability and to ways of resolving ethical dilemmas using relevant ethical theories, then presented explicitly the three-level conceptions of each of the dispositions.

The central teaching and learning artifice that we developed was the use of scenarios as settings for problems. These were designed to increase the awareness and proficiency of the students in dealing with problem situations that required utilisation of several (or all) of the graduate skills and dispositions. This artifice differs in some important respects from the models of teaching sustainability and ethics in a business curriculum discussed above. First, the artifice is multifaceted in that it calls upon students to examine scenarios from a number of different skills or dispositions, rather than from one alone. Second, it formed part of an intensive workshop attended by students from a range of business disciplines.

Several scenarios that primarily addressed sustainability and/or ethics were developed for use at the workshop. One of these involved "Transport" (the full details are on the website, www.graduateskills.edu.au, under "ethics" – though the case study could have been classified under "sustainability"). The overall aim was to, "examine assumptions about the role of transport as a component of professional working life", and the approach was a group investigation leading to a group presentation, which formed the final assessment. Teams were given some background context:

> *As a beginning professional in the finance or business world you will spend a substantial amount of your time at work, laying the foundations for a successful career. But additionally, you may find that you are spending substantial amounts of time getting to and from work. Is there anything you can do about this or is it a necessary evil? Looking beyond your own situation to the broader picture, how should the town or city in which you are living set up arrangements for transporting people to and from work? And indeed what direction should Australia, or the world as a whole, take in terms of transport infrastructure?*

Some specific questions were suggested as a starting point. For instance: Is it better to use public transport or private transport to get to work? What does "better" mean in this context? What will you/we/Australians do when petrol costs $5 per litre? $10 per litre? Is it cheaper to build infrastructure for public or private transport? In addition, students were told that they could formulate alternative questions for their investigation if they preferred.

A second scenario, "Gunns Pulp Mill", sought to engage the students in an understanding of sustainability in three dimensions – environmental ("green"), organisational (long-term business survival) and generational responsibility – in the context of a proposal to build a pulp mill in Northern Tasmania. These dimensions were intended to articulate with the three-level conceptions described earlier (Reid, Petocz, & Taylor, 2009) and the notion of "sustainable corporate performance" (Fauzi, Svensson, & Rahman, 2010), which seeks to measure financial, social and environmental elements. Students were presented with a set of common facts and the perspectives of five stakeholders. Then using the "jigsaw" method (Graduate Skills, 2010; Wood & Dixon, in this Issue), each member of a group was required to argue the case for an assigned stakeholder in relation to the overall sustainability of the proposal. This activity also explicitly addressed the skill of teamwork: the student groups were asked to report on whether the group had reached a consensus and how that consensus was reached.

Other scenarios are documented among the project materials on the website: they included desalination and water recycling; retirement incomes; employee drug testing; and e-mail usage in organisations.

As the culmination of the workshop, teams of students were allocated one of the scenarios to consider over the course of an afternoon and evening. They were asked to make a group presentation the next day to the student group as a whole, the project team, and members of an external reference group. In order to provide meaningful feedback, facilitators encouraged students to carry out an initial self-assessment, and to focus on the recommendations they received rather than the criticisms. Students engaged with the spirit of the workshop, participating in animated discussion and making incisive contributions. Several students reflected on their own values during the activities.

5. Evaluating the model

As one aspect of the evaluation, we measured the results of the workshop by conducting pre- and post-tests of the students' perceptions and levels of understanding of each of the graduate skills or dispositions considered at the workshop. Students were asked to write down what they understood by sustainability and ethics (and also critical thinking and teamwork) at the beginning of the workshop, and then also at the end. The statements were de-identified and presented in such a way that the pre or post nature was not indicated, and each was rated independently by the project members on a four-point scale that related to the level of conceptions (1, 2 and 3 coded for the three conceptions, and 4 was used if it was felt that a statement went even further than the broadest conception).

For instance, the statements that sustainability was "maintaining a desired state of affairs" and ethics was "working with a high standard of right and wrong" were given average scores of 1.0 (indeed, they were rated 1 by each team member). Both these statements were obtained from students in the pre-test. The corresponding statements in the post-test were: "Conserving resources – no resource is infinite as such: keeping something going in a desired state"; and "using different lenses or rules to decide the moral (right and wrong) form of conduct or behaviour": both of which received average scores of 1.6 (a mixture of 1s and 2s in each case).

The initial statement that sustainability was: "the value and ability of ensuring that there is continuation of the use of the resource well into the future" received an average score of 2.0, while the corresponding later statement scored much higher at 3.6:

> *A multi-conceptual notion; a specific paradigm of thinking, speaking and behaving which places emphasis not only on justice (e.g., inter-generational fairness, equity and protection), but also on the environmental, economic, social, political and ethical. Importance of maintaining the availability of resources for future use by future generations.*

Not all pairs of statements represented "improvements": for instance, this initial description of ethical practice was scored at 2.5:

> *Ethical practice is any behaviour taken by everyone that are perceived to be good and beneficial to the society. It should benefit as much people as possible. The main focus on ethical practice is the acceptance of others. Therefore, doing anything that is thought to be ethical by yourself is not enough. If others do not regard your behaviour as ethical, your behaviour should not be described as ethical practice.*

The corresponding statement in the post-test received an average score of 2.0:

> *[Ethical practice] is the behaviours that are generally accepted by the public that are regarded as good. They should benefit as much people as possible. Possibly, a cost and benefit analysis can be done.*

Despite this, the average ratings increased significantly for both sustainability (1.5 to 1.9, $p=0.001$) and ethics (1.9 to 2.1, $p=0.017$). This indicates a modest but appreciable increase in conceptions of sustainability and a small increase in conceptions of ethics. The tests we used may seem fairly imprecise, but they are focusing on what students think about the dispositions rather than asking them factual questions about them, and the changes are statistically significant even with the small numbers of students.

The students were also invited to give open-ended feedback during the workshop and a number participated in a post-workshop interview. The results of this testing and feedback are contained in the Project Report (Vu, Rigby, & Mather, 2011). One response to the question of what they found most useful in the workshop is apposite:

> *Probably sustainability actually. Because I guess my definition of it was almost entirely different to what we were taught … My original idea was just … having like sustainable resources and stuff like that. But it was more – but when we got down into it, it was more in depth. So instead of just covering just the environment and stuff like that, it became … more like sustaining how you deal with people as well, in a sense … it did open my eyes to the meaning of sustainability and I guess how I deal with things these days. So I am more conscious of how I use electricity, how I use water, etcetera.*

The intensive workshop model – as a model of teaching and learning graduate skills and dispositions, promoting change in knowledge, skills and attitudes – proved to be effective; and the materials developed for the workshop (and subsequently), including assessment rubrics for sustainability and ethics, are freely available on the website. Such an intensive workshop is resource dependent and may not be scalable to larger student populations within the usual constraints of a teaching semester. Nevertheless, as a means of raising student awareness of the sustainability disposition, this model proved to be particularly successful. A strength of this model of delivery is that it met in no small measure the pedagogical aim of exposing the participants to a range of experiences that

enabled them to observe, experience and develop an understanding of the dispositions and skills addressed.

Alternative formats could be considered. A one-day workshop would be easier to organise, but would give less time for the development of personal relationships so important for high-quality teamwork. Maybe the problem would be solved by two one-day workshops, held a week apart. If full-day workshops were impracticable, the investigations could be carried out in the standard lecture and tutorial framework. An introduction to the notions of ethics and sustainability could be given in a lecture; initial tutorials could look at critical thinking and teamwork; a scenario could be assigned to each team as an assignment; presentations could be made in a following tutorial; and a final lecture could be utilised as a debriefing session. In such a format it would be important to spend time on developing the skills of critical thinking and teamwork that enable groups to function most effectively when they are considering scenarios highlighting aspects of sustainability and ethics. One of the students commented in a follow-up interview:

> *I think you'd definitely have to have some kind of team building like workshop or something in the class. You kind of get everyone involved. Like everyone know each other. Possibly have like one or two team-based assignments. Then possibly like an individual one.*

6. Conclusion

The traditional focus in university learning on epistemology – what a student comes to know – is not enough when considering the development of dispositions such as sustainability and ethics: the ontological dimension – who a student is and who they are becoming – is also needed (Barnett, 2007). Rather than studying or learning about sustainability and ethics, a student uses their understanding of these dispositions to develop a new way of looking at the world and a new way of being and behaving as a professional.

This is particularly important for contemporary business students, as it could be claimed that the most common world-view of business (the "neo-classical economic paradigm" [Stubbs & Cocklin, 2007]) is contrary to notions of sustainability (particularly in the standard view that continued economic growth is a necessary condition of business success) and often utilises a fluid and frequently utilitarian view of ethics (such as privileging the view of the individual or company carrying out the business activity). Encouraging students to develop a broader view of the world of business and more appropriate ways of behaving within it should be a high priority in business education (and even more broadly). The benefits of a university education, such as status, earning power and access to desirable jobs, are often pointed out, particularly as a justification for the costs incurred. Less often is mention made of the responsibilities associated with being a university graduate, including the community leadership role in facing up to problems such as those of sustainability, and the expectation to be held to account with higher standards of ethical behaviour.

Shephard (2008) has discussed sustainability and ethics as components of the affective domain of learning, concerned with values, attitudes and behaviours. This framework taps into hierarchical categorisations of affective learning outcomes (see Atherton, 2010, for a discussion of Bloom's taxonomy in the affective domain), from a simple willingness to listen and acquire information, through to displaying commitment to principled practice and a willingness to change views and behaviour in the light of evidence. A range of pedagogical approaches have been shown to be valuable in enhancing students' dispositional learning. These include many of the approaches that we used in the project and workshop that we have described in previous sections: discussion and debate, group work, problem-based learning, analysis of case studies, peer evaluation, and self-reflection. Shephard (2009) has also investigated methods for assessing the outcomes of such learning, methods that could make a contribution to graduate dispositions of sustainability and ethics. Our project also addressed this point, developing rubrics for assessing students' levels of these dispositions (Wood, Thomas, & Rigby, in this Issue).

We will leave the last word to one of our students in his summary at the follow-up interview:

> *I loved the workshop ... I had a ball of a time and made some great friends. I learned a lot from it. I pushed myself. All these great experiences add up a lot and I want to be part of anything like that again if there's one in the future for sure. I just want to reiterate that I am encouraged by the fact that you guys are doing something like this, and I really hope that it will come to something and it will impact the way that the university teaches and hopefully improve its standards as well.*

Acknowledgements

Thanks to Leigh Wood and Marie Kavanagh for useful comments on an earlier draft.

References

Anderberg, E., Norden, B., & Hansson, B. (2009). Global learning for sustainable development in higher education: recent trends and a critique. *International Journal of Sustainability in Higher Education*, 10(4), 368–378.

Atherton, J. (2010). Learning and teaching: Bloom's taxonomy. [Online] Available http://www.learningandteaching.info/learning/bloomtax.htm (December 17, 2010).

Barnett, R. (2007). *A will to learn: being a student in an age of uncertainty*. Maidenhead, UK: Society for Research into Higher Education and Open University Press.

Boatright, J. R. (2003). *Ethics and the conduct of business*. Upper Saddle River, NJ: Prentice Hall.

Fauzi, H., Svensson, G., & Rahman, A. (2010). "Triple Bottom Line" as "Sustainable Corporate Performance": a proposition for the future. *Sustainability*, 2(5), 1345-1360. [Online] Available: http://www.mdpi.com/2071-1050/2/5/1345/pdf (November 26, 2010).

Graduate Skills. (2010). Learning and teaching graduate skills website. [Online] Available http://www.graduateskills.edu.au (October 21, 2010).

Marton, F., & Booth, S. (1997). *Learning and awareness*. Mahwah, NJ: Lawrence Erlbaum.

May, W. (Ed.) (1990). *Ethics in the accounting curriculum: cases and readings* (*The AAA Casebook*). Sarasota FL: American Accounting Association.

McDonald, G. M. (2004). A case example: integrating ethics into the academic business curriculum. *Journal of Business Ethics*, 54, 371-384.

Reid, A., & Petocz, P. (2006). University lecturers' understanding of sustainability. *Higher Education*, 51(1), 105-123.

Reid, A., Abrandt Dahlgren, M., Dahlgren, L. O., & Petocz, P. (2011). *From expert student to novice professional*. Dordrecht, The Netherlands: Springer.

Reid, A., Petocz, P., & Taylor, P. (2009). Business students' conceptions of sustainability. *Sustainability*, 1(3), 662-673. [Online] Available: http://www.mdpi.com/2071-1050/1/3/662 (October 15, 2010).

Reid, A., Taylor, P. & Petocz, P. (2011). Business as usual: business students' conceptions of ethics. *International Journal for the Scholarship of Teaching and Learning*, 5(1). [Online] Available: http://academics.georgiasouthern.edu/ijsotl/v5n1/articles/PDFs/_ReidTaylorPetocz.pdf (January 24, 2011).

Shephard, K. (2008). Higher education for sustainability: seeking affective learning outcomes. *International Journal of Sustainability in Higher Education*, 9(1), 87-98.

Shephard, K. (2009). e is for exploration: assessing hard-to-measure learning outcomes. *British Journal of Educational Technology*, 40(2), 386-398.

Sin, S., Reid, A., & Dahlgren, L.O. (2009). The conceptions of work in the accounting profession in the 21st century from the experiences of practitioners. Presented at *Researching Work and Learning Conference RWL6*, Roskilde University, Denmark, July.

Stubbs, W., & Cocklin, C. (2008). Teaching sustainability to business students: shifting mindsets. *International Journal of Sustainability in Higher Education*, 9(3), 206-221.

UNESCO. (2005). International implementation scheme: UN Decade of Education for Sustainable Development. [Online] Available: http://unesdoc.unesco.org/images/0014/001486/148654E.pdf (October 21, 2010).

UNESCO. (2010). UN Decade of Education for Sustainable Development website. [Online] Available: http://www.unesco.org/en/education-for-sustainable-development/decade-of-esd/ (October 21, 2010).

United Nations. (2002). Report of the World Summit on Sustainable Development. [Online] Available: http://www.un.org/jsummit/html/documents/summit_docs/131302_wssd_report_reissued.pdf (October 21, 2010).

Vu, T., Rigby, B., & Mather, G. (2011, in press). Final report: embedding the development and grading of generic skills across the business curriculum. Australian Learning and Teaching Council. [Online] Available: http://www.altc.edu.au/project-embedding-development-grading-macquarie-2008.