

**Matching Form to Content in Educating for Sustainability:
The Masters (MSc) in Responsibility and Business Practice**

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Biographical note

Judi Marshall is a Professor of Organizational Behaviour in the School of Management, University of Bath, UK. Her research interests have included managerial job stress, women in management, organizational cultures, organizational change and career development. She contributes to action research practices by developing self-reflective, action-oriented inquiry approaches. She teaches on a range of academic courses, and is Director of Studies for the *MSc in Responsibility and Business Practice*.

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Abstract

This chapter suggests that in educating for sustainability we need to generate forms and practices of education which are congruent with the issues addressed. It describes the development of the MSc in Responsibility and Business Practice, a Masters programme which has an explicit intent to ‘address the challenges currently facing those managers who seek to integrate successful business practice with a concern for social, environmental and ethical issues.’ We adopted action research as our educational approach in order to provide question-posing, critical, values-aware education, which can help participants engage reflectively with challenging, controversial, multi-dimensional, potentially disturbing, issues, and help them consider both thinking and acting in new ways. The chapter explains key educational choices made in designing the degree, describes the teaching practices adopted, and reviews some key learning, based on staff experiences and participant feedback.

Keywords: action research, assessment, ecology, education, environment, social justice, sustainability, staff development.

Introduction

Some scholars are seeking to integrate sustainability into core conceptions of business (see for example: Shrivastava, 1995a & 1995b; Starik & Rands, 1995; Westley and Vredenburg, 1996; Elkington, 1997; Starik & Marcus, 2000). A parallel area deserving attention, but too seldom addressed is how and to what extent sustainability, ecology and social justice should be incorporated into mainstream management education (for exceptions see Shrivastava, 1994; Bilimoria, 1998; Egri and Rogers, forthcoming).

Training in ethics is sometimes advocated as a solution to concerns about business responsibilities. Although this may be a step forward, it is also a limited, conceptually restricted response unlikely to foster the asking of sufficiently radical questions about the impacts of business on the planet. If, as many argue, sustainability challenges require a fundamental redesign of commerce (see for example Hawken, 1993), participants in management education programs would be better served by targeted encouragement and training, rather than by being schooled to believe that business should continue as usual

Yet, various factors deter educators from addressing sustainability. Some categorize ecological and social justice issues as value-laden, while claiming that mainstream management education is value-neutral. Given that all theorising arises from some perspective, I contest these claims of objectivity. The assumptions of economics, for example, are worthy of review in this light (Daly and Cobb, 1990). Others question if the planet is in environmental crisis (Meadows et al, 1992; Lomborg, 2001). Still others debate whether challenges can be addressed by adapting current business and societal mindsets (Lovins et al, 1999). Although it may be difficult, we must bring these debates into the classroom. Rather than act to deter, controversy should encourage us to consider *how* we educate and learn in relation to such issues, especially because they are as relevant to everyday behaviour-as to intellectual understanding. We must ask: *What is good practice in educating for sustainability?*

Current educational forms may be part of our ecological problems. Orr (1994), for example, critiques their propensity, inter alia, to divide the world by academic discipline, to advocate domination over nature, to promote individualism and rights rather than citizenship and responsibility and to separate rationality from feeling and valuing.

‘The crisis we face is first and foremost one of mind, perceptions, and values; hence, it is a challenge to those institutions presuming to shape minds, perceptions, and values. It is an educational challenge. More of the same kind of education can only make things worse.’ (Orr, 1994:27)

Introducing electives about environmental, social and ethical issues into established programs like MBAs is valuable, but it fails to meet Orr’s challenge. It treats the issues as if they are discrete add-ons to mainstream philosophies of business and implies that the latter do not require fundamental reform.

In this chapter, I explore how issues pertaining to ecology, sustainability and social justice could be integrated into business education. I advocate that pedagogy matters. I suggest that we need to generate educational forms and practices that are robustly congruent with the issues addressed. Seeking to match form to content in this way, I and my colleagues, Gill Coleman and Peter Reason, based our educational approach in action research and designed a new and innovative Masters degree.

We chose action research (explained below) to provide students with a continual process of inquiry with which to engage in the challenges of considering sustainability and with disciplines for developing their practice in tandem with their intellectual understanding. We also designed the degree to provide ongoing, reflective, active learning opportunities so that we could show and enact issues relevant to sustainability and provide a forum to discuss them. Thus, action research has fundamentally influenced course design, the educational approaches, the subjects covered and participants' learning processes.

The MSc in Responsibility and Business Practice is run by the Centre for Action Research in Professional Practice at the School of Management, University of Bath, UK, in partnership with the New Academy of Business (an independent educational organization established in 1995 by Anita Roddick, founder of the Body Shop International). The degree was launched in 1996 to 'address the challenges currently facing those managers who seek to integrate successful business practice with a concern for social, environmental and ethical issues' (course leaflet). The brochure, including comments from graduates, can be found on our Web site:
<http://www.bath.ac.uk/management/carpp/msc.htm>

This chapter outlines key educational choices made in designing the degree, describes the teaching practices adopted and reviews some of our learning, based on staff experience and extensive participant feedback.

Program and participants

The MSc in Responsibility and Business Practice is part-time and comprises eight intensive, five-day residential workshops over two years. Most of these take place at the University of Bath campus, with the exception of the third workshop, which explores deep ecology, theoretically and experientially (Maughan and Reason, 2001) and is held at Schumacher College in Devon, an International Centre for Ecological Studies close to a relative wilderness area that enables students to experience living systems.

Course participants range in age from about 25 to 60. They come from a wide range of job areas and organizations, including for-profit companies, consultancies, the public sector and non-governmental organizations. Some people already have sustainability or corporate social responsibility remits. Others want to move their professional lives further in these directions. Many are change agents in some way and want to develop these skills as part of the program. People come from various countries in addition to the UK, including Brazil, Canada, Finland, Kosovo, New Zealand, Portugal, South Africa,

Sweden, Switzerland, the USA and Vietnam. This diversity is perceived by participants as a strength of the degree.

As of January 2003, 59 people have graduated from the degree, 52 are currently registered and the sixth intake in March 2003 is expected to reach the current maximum capacity (in terms of learning environment and staffing pattern) at 24 participants.

Educational choices

The Masters is innovative in content and learning approach. Underlying its design was our intention to explore key issues relating to ecology, sustainability, social justice and business in a program where these are declared and legitimate agendas — not hidden, tagged on or apologised for in a program based on mainstream assumptions — and considered alongside each other to allow inter-relationships and potential tensions to become apparent. To do this at all, and certainly to do this well, we believed that we had to devise forms of education and learning that are congruent with the nature of the material that we encounter and that offer participants robust methods and skills for engagement. The nature and potential controversy of the areas required us to consider how we educate and learn: we realized ‘information’ based teaching was not enough.

We therefore set out to provide adult education that was question-posing, critical and values-aware. We also wanted to encourage participants to engage reflectively with challenging, controversial, multi-dimensional and potentially disturbing issues and, consequently, to help them think and act differently. We thus chose action-research-based approaches because we saw them as flexible, inquiry-based disciplines, able to contain and enable the learning of course participants and of ourselves. These approaches also support the development of practice with intellect and of experiential learning with propositional learning.

In the following sections, I explore how we implemented our intentions. I start with our foundations in action research. Then I consider course content. I show how action research has shaped our educational practices. Finally, I discuss some of the challenges.

Learning approaches Part 1

As already indicated, action research has strongly influenced the course form and content. As tutors, we suggest that there are no simple solutions to the dilemmas posed by trying to integrate ecology, sustainability and social justice with successful business practice, and so invite participants to become reflective, active explorers and pioneers.

Definitions of action research abound and have their merits. Here I offer just one definition for those unfamiliar with these approaches:

“...action research is a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview which we believe is emerging at this historical moment. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.” Reason & Bradbury (2001:1)

Action research practices provide potential ‘containers’ from which course participants can address the challenges of course content, and maintain a simultaneously appreciative and critical, question-posing approach in value-laden areas. Objectivity is not an option, so we seek to offer participants frames and grounded practices from which to develop critical subjectivity and the capacities for continual learning.

Course Content

The Masters covers topics that are normally included only as marginal or optional courses in management degrees, and collects these into one educational experience. Each workshop explores a content area in depth and incorporates other, ongoing strands of learning and activity.

1	Globalization and the new context of business
2	New economics
3	Ecology and sustainable development
4	Sustainable corporate management
5	Humanity and enterprise
6	Corporate citizenship
7	Diversity and difference in a global context
8	Self and world futures

Table 1: The eight workshop themes

A workshop week has four main streams of activity:

1. Topic-based discussions exploring that workshop’s theme; including Content Reviews
2. Auxiliary strands of learning which run throughout the degree – ‘cross-woven threads’ (see below)
3. Learning Groups
4. Ongoing Process Reviews and a Business Meeting

Core course themes

The content in workshops and the learning resources are updated each time the sessions are taught. Our intention is to provide critical material that enables students to identify and engage with key issues, questions and challenges. Those who want to achieve a more detailed understanding of an area do so independently. The typical format for exploring the week's topic involves discussion of designated readings that participants have done in advance. This discussion is focused on the first day into a mapping session in which key themes and issues are identified as learning agendas for the week. (Flipchart notes on these would typically remain on the course room walls during the workshop as reminders.) Tutors may also present topic overviews at this stage. Tuesday to Thursday we have sessions with visiting speakers and core staff tutors.

Visiting speakers who are leading authorities in an area or people working with innovative management or other practices provide many of the topic-based sessions. They are invited in to work with the course group, rather than only to lecture. We favour active session formats, involved critical discussion, use of case examples and hearing speakers with divergent perspectives. For example, Intake 4's workshop on Corporate Citizenship (June 2001) included: exploring Sky TV's 'Reach for the Sky' project (a nation-wide social marketing venture helping young people develop self-esteem and career aspirations), the impact of Rio Tinto's mining explorations on communities, and a moderated debate between representatives of Medicin san Frontiers and GlaxoSmithKlein concerning affordable access to medicines in the developing world. Core staff facilitated discussions and related examples to relevant literature.

Course participants and graduates also contribute content from their expertise. As the program proceeds, participants can see the interconnections and potential tensions between issues pertaining to ecology, sustainability, social justice, ethics and business, rather than treat them as discrete problems to solve. Elkington (1997), for example, invites us to recognise that there are potential shear zones between economic, environmental and social bottom lines. Many, perhaps most, current challenges are not easily resolvable.

Auxiliary strands of learning

In addition to the designated workshop topics, we have identified other strands of theory and practice that we believe are important to facilitate people's learning. We call these 'cross-woven threads.' They enable participants to work with the content of the degree in question-posing, critical, reflective and applied ways. The main cross-woven threads are inquiry (based in action research), systemic thinking, change and being an agent for change, power, gender, diversity and leadership. Sessions on these topics are interspersed through the workshops with opportunities to revisit themes and issues for deeper engagement as the program develops. Coverage includes introducing conceptual frameworks and offering exercises to apply them to course participants' practices and lives. In this, and other aspects of the program, we work with respect for multiple ways

of knowing, such as experiential, practical and intellectual (Heron, 1992; Goldberger et al, 1987).

These auxiliary strands of learning are important because educating for sustainability is not just about offering information, although putting information (such as data on current ecological degradation) into systems where it has not been before (such as management education) is a vital aspect of systemic change (Meadow, 1991). It is about how we 'think,' and how we work with that information - it is about how we know. As Berman (1989) offers enigmatically: '*How* things are held in the mind is more important than *what* is in the mind, including this statement itself.' (p.312).

Intellectual knowing then, is insufficient. Moving towards sustainability requires people to act and think in new ways. Hence our emphasis in the course on developing practice as well as understanding. Again, we find action research a robust, multi-faceted medium for enacting and exemplifying the course content and issues. Some course participants identify this stream of learning as a major aspect of their development during the course, especially in their abilities to be change agents in their organizations. Graduates' comments in the Course Brochure reflect this.

Learning approaches Part 2

The program is designed to foster disciplined inquiry into issues and practices involved in seeking a more ecologically and socially just world. We use action research principles to achieve this. Below are some examples.

Training in action research

Training in various forms of action research is offered, including those for self-reflective, first person inquiry (Marshall, 1999, 2001; Fisher, Rooke, & Torbert, 2000), co-operative inquiry, engaging in research with others (Maughan and Reason, 2001); and third person inquiry, seeking to spread inquiry capacities in a wider organizational system (Reason and Torbert, 2001). We cover an array of action research practices and do not prescribe which ones participants should adopt. We require only that students do find some suitable forms of discipline (this is a coursework requirement). Participants are encouraged to develop these skills in their everyday engagement in the program, individually and collectively, as well as in their individual inquiries. For example, we discuss how to communicate appropriately with visiting speakers, including how to ask probing questions without attacking if a student's perspective differs from the speaker's. Such issues are identified by the group and considered when preparing for and debriefing speaker sessions.

Cycles of action and reflection

Engaging in cycles of action and reflection – a key feature of action research methodology - to generate continual testing between tentative understanding and practice, is incorporated into the course format in various ways. For example, all workshops

include time for both content and process reviews. Performance is therefore monitored as each workshop week and the course proceeds. This is a mutual activity, with course participants joining staff in taking responsibility for the generativity of the program. Proposed changes are typically treated as experiments to be reviewed and, if necessary, readjusted.

Cycles of action and reflection are also built into the course to give shape to students' learning journeys. Course participants work in Learning Groups of four or five members (a tutor is assigned to each group, but much meeting time is self-managed). These meet on the Mondays and Fridays of the workshop weeks, that is, the first and last days. This scheduling deliberately introduces cycling between action and reflection into the structure and learning experience of the course. Each Friday, members set learning agendas to pursue during the coming months. Between workshops they engage in action, although this is likely to incorporate reflection too and is not limited to one cycle. Participants engage in more sustained reflection by writing learning papers (circulated before the next workshop) and reporting to their groups on the Monday.

Congruence of assessment practices with territories of learning

An important feature of the learning design of the degree is using assessment processes that are congruent with innovative, inquiry-based forms of education and that adhere to established expectations of academic excellence. We provide clear guidelines to evaluate quality, but allow participants, in consultation with their staff tutors and learning groups, to interpret these in ways relevant to their own work. Four broad criteria of quality are used covering intellectual, inquiry method, practice and self-reflective dimensions. These are discussed extensively with course participants. Students are required to select topics and issues of importance to them and to their practices. They establish, and continuously develop, self-guided learning agendas. Staff work with participants to identify their learning interests and devise inquiry strategies. Learning group peers are also highly important for this.

An illustration:

First Year Learning Paper inquiries might:

1. Take an area of sustainability practice to review: e.g. how environmental, social and ethical auditing practices might be applied to one's company.
2. Explore ideas and literature relating to a chosen topic: e.g. deep ecology, transformative change or new economic theorising.
3. Track practice: e.g. a consultant introducing notions of sustainability might explore what formats encourage client exploration and how to manage issues of credibility.

Second Year Learning Projects tend to be grounded in participants' practice and must cover the four quality criteria. For example, an internal change agent seeking to raise consciousness of sustainability issues in his or her organization might plan and track the initiatives with an action inquiry approach using multi-

dimensional theories of power and literature about strategies for organizational change (Ainger, 2001).

The course format also provides frequent opportunities for feedback and discussion. During the first year, participants receive written and verbal feedback on their learning papers from tutors and peers. After one year, there is an interim assessment, using the four criteria of quality, for which students submit their first three learning papers (revised if they choose) and a first year learning review. Detailed feedback is given. Resubmission is required if the work is not satisfactory. (If a student consistently fails to submit satisfactory work during the first year, he or she may be required to withdraw.) During the second year, participants work on chosen projects, again engaging in research cycles, writing papers, and receiving feedback. At the end of the degree they submit a project report and full course learning review for assessment. Successful work is graded Pass or Distinction. Regulations allow one resubmission if additional work is required.

In a program that does not treat academic material as value-neutral and encourages students to develop practice as well as intellectual competence, some educators may be concerned about academic quality. As noted above, this is maintained by using the four criteria. In the UK system, each course has an external examiner from another institution, part of whose role is to advise on quality standards. The external examiner for the first four years of the degree, in his end of office report, said that the degree 'has matured rapidly to become well balanced in terms of theory, practice and critical reflection.'

Using collaborative action research to manage course process

As already indicated, the course is managed by staff in strong collaboration with participants. There are some intrinsic dilemmas in the program format that each course cohort has to address for itself. It would be restrictive educationally for staff to take authority and impose resolutions. Two core dilemmas are how much to focus learning through engaging with visiting speakers versus how much to generate learning from within the course cohort, and what is an appropriate balance between sessions focussing on content and those addressing inquiry and other cross-woven threads. Again, action research informs our educational practice. We invite discussion of these choices as we run each workshop week and plan future workshop formats. This educational approach exemplifies and mirrors our course purposes: to raise issues relevant to sustainability and social justice which we thus encounter, reflectively, in action rather than only learning 'about' them; and to practise skills of collaborative action research.

Some of the issues and learning we have encountered along the way

In this section I consider some of the issues that have arisen from running the degree, drawing on staff experience and participant feedback.

Developing our practices for teaching action research

One dimension of our learning as staff has been how we can offer action research approaches and support people in this aspect of their learning. While we explain this core feature of the course during marketing, at Open Days, and in interviewing applicants, what it may really entail is not always apparent to people. Also, each participant must develop skills of inquiry in his or her own way. Typically this learning is cyclic and takes time. We offer presentations, readings, workshop sessions and direct support to people implementing inquiry in their work and lives. We have learned that once is seldom enough to thoroughly ground inquiry practices, and so are now doing more recapping as the course progresses. The learning groups and peer support are vital to the development process. Typically, graduates report that their understanding of inquiry progressed with the course. Some were helped by engaging in disciplines (such as cycling between action and reflection) automatically initially, and then seeing the learning this brought, others by experiencing ways in which the program exemplifies and models action research. We continue to develop our practice on this aspect of the course.

How to position staff expertise in multi-disciplinary education

One challenge is how to engage in integrative exploration when the tutors involved are unlikely to have expertise in all of the topic areas covered. What teaching approach is appropriate? How can question posing be sufficiently robust? How can staff work together from diversity of content knowledge and potentially of epistemology? What kinds of learning strategies do course participants need to adopt?

We developed the staffing pattern during the initial years of the degree. Core staff act as intake tutors. Usually, two go through the degree with a cohort of students. They also act as learning group tutors. They have expertise in some fields, especially inquiry and other cross-woven threads, but are not subject experts across all topics covered on the degree; this would be impossible given the scope of material. Tutors must, however, have the ability to engage in and encourage critical questioning across topics. How to ensure quality of content engagement in a course that is wide-ranging and integrative rather than discipline-segmented is an important issue we have addressed. In some ways, we are using inquiry approaches to provide a 'meta' frame of 'expertise' which holds the program as a whole. The visiting speakers and reading materials are the primary means for introducing subject expertise within this. For specific workshops some tutors from the core team take a more content-related role in areas of their own specialization, selecting and organizing visiting speakers, chairing sessions and providing topic area input. This provides continuity and depth of grounding within the core staff team.

The challenges of seeking to encompass the world

Addressing globalization from a specific base makes it challenging to engage with a wide range of perspectives, if we seek to include potentially marginal voices from our own society and from the developing or majority world. Seeking diversity has influenced our

choices of visiting speakers and reading materials, and is an issue we will continue to monitor. We do benefit greatly from course participants' diversity. And it is concerning that potentially marginalised voices do not seem well incorporated into the rising tide of literature on corporate social responsibility. 'Mainstream' voices still seem to dominate.

How do we adequately contain and support education of this kind?

This program, and indeed all similar education, makes high demands on participants, and consequently on staff. Thus, what kinds of competence do tutors require?

The Masters involves engaging with potentially disturbing and upsetting issues, such as stark information about ecological degradation and global poverty, doubts about mainstream business assumptions and challenges to people's mindsets and life styles. Most participants find their learning unsettling at some time. How do we 'contain' and work developmentally with such learning experiences?

Many graduates report that the degree has been a life-changing experience. Some come to learn primarily about the content and are surprised by the program's wider impacts. Others come to re-examine their careers and life-paths. Even among the latter, some would certainly say that their learning and development through participating in the program was more than they expected. So we must ask, how, or perhaps if, the course can be sufficiently containing. Data from the Quinquennial Course Quality Review (conducted during 2001/02 as a University of Bath requirement) suggested that people generally feel supported by the course, staff and learning community. This is an aspect of the program that needs ongoing attention. Some graduates want to continue the networking and action research based development they had during the degree. While some activities are peer generated, staff are also now offering alumni learning groups.

Another issue is how participants cope with education which foregrounds issues of sustainability and social justice when addressing these concerns may "unfit" them for high-paying jobs in mainstream corporate life (an intent of management education, especially the MBA). Certainly some graduates are reorienting their careers and taking the financial consequences of being in a learning phase in new, for them and for society, territories. How do course participants and staff work with such discords? The challenge is ongoing.

For all these reasons, and more, many participants engage in the program with high levels of commitment, but also with potential ambivalence, especially concerning how much change they want to encounter. They therefore expect a great deal, including in their relationships with staff. They do not approach this as an 'ordinary course'. While this is the kind of education to which staff are committed, and with which they have experience, high participant expectations, and the nature of those expectations, place considerable demands on tutors. Are faculty trained in, prepared for, and sufficiently supported to do this kind of educational work? The short answer is probably 'not usually'.

Our program requires the following as staff competencies: academic capabilities in action research and other cross-woven threads; the ability to identify issues and engage in critical questioning in topic areas related to sustainability and social justice; the ability to facilitate group dynamics in a learning community; the ability to coach individual learners in inquiry-based development which may be unsettling to them; the ability to enact action research as a tutor engaging simultaneously in all the above; and the ability to judge appropriate boundaries, for example by questioning how much to work with group process. Also, some expertise in one or several content areas is helpful.

In navigating my own way through some of these issues, I find it helpful to remember Heron's (1999) invitation to see facilitation as a circumstance-appropriate blend of exercising authority, joining in participation and creating space for autonomy. Educating for sustainability using appropriate forms is, then, challenging work for tutors.

At Bath, we hold regular staff meetings, which include discussions of the practices and crafts of working on the program. We learn from each other, and with course participants as we proceed. We have recently held a more substantial staff development workshop, mapping areas of competence, conducting self and peer assessments against them and making development plans, individually and jointly.

Conclusion

In this chapter I have advocated matching form to content in educating for sustainability. I have showed how we designed and teach a program founded in action research.

Action research has been a robust and pliable base from which to develop this MSc. It helps us and course participants engage with, and experience, the challenges of sustainability and social justice in ways we could not do through more traditional forms of education. The first years have been an exciting and demanding journey for us as tutors. In this too action research, in its various guises, has been our resource.

References

- Ainger, C. (2001) MSc Project Report. (University of Bath. Unpublished.)
Berman, M (1989) *Coming to our senses: Body and spirit in the hidden history of the west*. (London: Unwin).
Bilimoria, D. (1998) 'What if we taught as if "all our relations" mattered?' *Journal of Management Education*. 22(4): 449-451.
Daly, H., and J. B. Cobb (1990) *For the Common Good*. (London: Green Print).
Egri, C., and K. Rogers (forthcoming) (eds) *Journal of Management Education* Special Issue on 'Teaching about the Natural Environment in Management Education'
Elkington, J. (1997) *Cannibals with forks: the triple bottom line of 21st century business*. (Oxford: Capstone).

- Fisher, D., Rooke, D., and W.R.Torbert (2000), *Personal and organisational transformations: through action inquiry* (Boston MA: Edge \Work Press).
- Goldberger, N.R., Clinchy, B.McV., Belenky, M.F., and J.M.Tarule (1987) 'Women's Ways of Knowing: On gaining a voice', in P.Shaver and C.Hendrick (eds) *Sex and Gender*. (Newbury Park, Calif: Sage): 201-228.
- Hawken, P. (1993) *The ecology of commerce* (New York: HarperCollins Publishers).
- Heron, J. (1992) *Feeling and Personhood: Psychology in another key*. (London: Sage).
- Heron, J. (1999) *The Complete Facilitator's Handbook*. (London: Kogan Page).
- Lomborg, B. (2001) *The Skeptical Environmentalist*. (Cambridge: Cambridge University Press).
- Lovins, A. B., Lovins., H. and P. Hawken (1999) 'A road map for natural capitalism', *Harvard Business Review*, (May-June): 145-158.
- Marshall, J. (1999) 'Living life as inquiry', *Systemic Practice and Action Research*, 12.2: 155-171.
- Marshall, J. (2001) 'Self-reflective inquiry practices' in P. Reason and H. Bradbury (eds), *Handbook of Action Research* (London: Sage): 433-439.
- Maughan, E., and P.Reason (2001) 'A co-operative inquiry into deep ecology', *ReVision*, 23. 4: 18-24
- Meadows, D. H. (1991) 'Change is Not Doom', *ReVision*, 14.2: 56-60.
- Meadows, D. H., Meadows, D. L., and J.Randers (1992) *Beyond the limits: Global collapse or a sustainable future*. (London: Earthscan).
- Orr, D. W. (1994) *Earth in mind: On education, environment, and the human prospect*. (Washington, DC: Island Press).
- Reason, P., and H. Bradbury (2001) 'Introduction' in P. Reason and H. Bradbury (eds), *Handbook of Action Research* (London: Sage): 1-14.
- Reason, P., and W.R.Torbert (2001) 'Toward a Transformational Science: a further look at the scientific merits of action research'. *Concepts and Transformations*. 6.1: 1-37.
- Shrivastava, P. (1994) 'Greening business education: Towards an eco centric pedagogy'. *Journal of Management Inquiry*. 3.3: 235-243.
- Shrivastava, P. (1995a) 'Ecocentric management for a risk society'. *Academy of Management Review* 20.1: 118-137.
- Shrivastava, P. (1995b) 'The role of corporations in achieving ecological sustainability'. *Academy of Management Review* 20.4: 936-960.
- Starik, M., and A.A.Marcus (2000) 'Introduction to the Special Research Forum on the management of organizations in the natural environment: A field emerging from multiple paths, with many challenges ahead'. *Academy of Management Journal* 43.4: 539-546.
- Starik, M., and G.P.Rands (1995). 'Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations'. *Academy of Management Review* 20.4: 908-935.
- Westley, F., and H.Vredenburg (1996). 'Sustainability and the corporation: Criteria for aligning economic practice with environmental protection'. *Journal of Management Inquiry*, 5.2: 104-119.