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Journal of Management Education 2003; 27; 188

DOI: 10.1177/1052562903251411

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EDUCATING FOR SUSTAINABILITY: DEVELOPING CRITICAL SKILLS

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This article explores the contribution a pedagogical approach based in critical theory can make to education for sustainability in business schools. In addition to the regular business and environmental management curriculum that provides tools for incremental improvement, we advocate introducing a radical change perspective aligned more with the “strong” sustainability paradigm. Concepts from critical theory can be usefully employed to bridge weak and strong sustainability paradigms. A critical skillset incorporating reflexivity, critique, and social action/engagement is elaborated and illustrated through the incorporation of these skills in the framing of an environmental management/sustainability elective and through exercises.

Keywords: *environmental management; sustainability; critical perspective; business and management education; environmental elective*

Previous work elaborating an appropriate worldview for students of sustainability indicates a need for different priorities and perspectives from many of those currently promulgated in business school classrooms (Roome, 1994, 1998; Springett & Kearins, 2001). A growing body of theory on business and sustainability also suggests that what organizations require to become sustainable is, in many ways, fundamentally different from the status

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JOURNAL OF MANAGEMENT EDUCATION, Vol. 27 No. 2, April 2003 188-204

DOI: 10.1177/1052562903251411

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quo (see, for example, Ehrenfeld, 1999; Welford, 1995, 1997a, 1997b, 2000). In this article, we discuss how we bring some of the different ideas drawn from critical theory into our teaching of postgraduate students in environmental management/sustainability electives in two New Zealand business schools.

Our focus is on how courses dealing with sustainability can be shaped to include a critical theory perspective rather than on what specific content might be delivered in an environmental management/sustainability elective, because much content is already provided elsewhere.¹ Critical theory has been applied to a wide range of subject areas but is particularly apt in the promotion of radical change agenda, such as ecojustice and sustainability. However, the contribution of critical theory to education for sustainability in the business school context has not really been explicitly addressed. The critical theory perspective allows us to explore with students the benefits and limitations of current business practices and consider possibilities for change.

We first describe ideas for the achievement of sustainability that can be placed along a continuum from weak to strong sustainability. We frame current business perspectives at the weaker end of the continuum as representing a *maneggiare* construction of sustainability (Springett, 2002), whereas at the other end, we consider a more radical perspective that presents a considerable challenge to current modes of organizing. We then consider the relevance of a critical theory approach to sustainability education and focus on three key skills derived from critical theory that allow us to bridge the *maneggiare* and radical change paradigms. Finally, we illustrate the incorporation of these skills in our framing of environmental management/sustainability electives and through a series of class exercises.

BUSINESS AND SUSTAINABILITY

The most often cited definition of sustainable development (SD) is that of the World Commission on Environment and Development (WCED) (1987): development that “meets the needs of the present generation without compromising the ability of future generations to meet their own needs” (p. 8). A key feature of the WCED definition is the potential seen by its proponents to integrate environmental and economic concerns, along with a concern for the well-being of all. In this conception, SD implies greater equity and continued growth, but growth of a more environmentally, socially, and economically sustainable kind.

A range of different views persists, however. The WCED definition has been widely debated, contested, and criticized (O’Riordan, 1991; Pearce, Markandya, & Barbier, 1989). Some see its potential in promoting advanced

or benign capitalism as the solution to meeting intergenerational needs of an increasing world population, with several organizations beginning to argue that a strong “business case for sustainable development” exists (e.g., Day & Arnold, 1998). Others see the WCED definition as emanating from the management paradigm that captured nature, and they deplore its unholy alliance with economic growth (e.g., *The Ecologist*, 1993).

Emphasizing this dialectic, Harvey (1996) sees the WCED framing of SD as ultimately about preservation of a particular social order rather than about preservation of nature as such. Thus emerges the possibility of business action toward sustainability, and the environment in particular, yielding win-win situations (Porter & van der Linde, 1995), that is, the possibility of environmentalism being “good for business.” Elkington’s (1997, 2001) triple bottom line heuristic is based on the possibility of responsible business action being good for society as well. Welford (1998) points out that businesses as the major polluters are actively engaged in defining sustainability-related concepts for themselves “in a way which at best gives a weak definition of sustainable development” (p. 5). Turner (1993) identifies weak sustainability as a form wherein limits are set on natural capital usage and where the precautionary principle of safe or minimum standards does apply but still involves trade-offs. This form of sustainability most readily appropriated by business reflects what we might call a *maneggiare* approach, that is, one where business controls both the language and practice of sustainable development with its own, usually economic, interests, firmly to the fore. This approach involves the adoption of “business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, sustaining and enhancing the human and natural resources that will be needed in the future” (International Institute for Sustainable Development [IISD], 1992). A *maneggiare* approach can thus be adopted without significant changes in values, core technologies, or organizational shape.

Many commentators agree, however, that sustainability requires new modes of decision making and action fundamentally different from those embedded in present-day organizational routines (e.g., Shrivastava & Hart, 1995, Welford, 1995). Some have identified a range of conditions under which ecologically sustainable organizations might emerge, including smaller corporate entities and structures more responsive to environmental concerns, the incorporation of longer timeframes, and community-based and bioregional models rather than organization-based models. Welford’s (1995) radical approach involving the promotion of the concepts of equity, equality, and futurity within a postmodern framework emphasizes a distinct shift in business style from the *maneggiare* approach we outlined earlier to one based “on the recognition of values at the global, organizational and individual levels”

(p. 147). He advocates values of smallness, wholeness, posterity, community, and quality. The more radical paradigm shift in values alluded to here is akin to a strong form of sustainability that advocates that society cannot simply let economic activity result in a continual decline in the quality and functions of the environment and of life in general (even though there may be other benefits of such activity). Strong sustainability thus argues against the indefinite substitutability of resources (Turner, 1993) and maintains that the life opportunities of future generations can be secured only if natural resources and environmental quality are specifically conserved for their benefit (Daly, 1996). Seen in this light, sustainability requires fundamental change to many of the structures promoted in modern capitalism and is beyond the capacity of organizations operating in competition for a shrinking pool of resources, advocating profits at all costs.

THE CONTRIBUTION OF CRITICAL THEORY

Over the past decade, particularly, an increasing body of research has critiqued orthodox management theory and business practice from a critical theory perspective (see, for example, Alvesson & Deetz, 1996; Alvesson & Willmott, 1992, 1996). A commonly cited view is that the nature of orthodox management theory has played a role in creating and supporting systems that have rendered business values and practices largely inimical to sustainability. An overemphasis on economic performance may well be core to the damage to people and the environment that can be laid at the door of corporations. That management orthodoxy is largely antithetical to sustainable development can be perceived as amplifying the resistance by business to fundamental change and more wholehearted engagement in the discourse.

The numerous shifts in theory in the management literature have had a limited impact on what is a fundamentally positivist paradigm of power based on hierarchical structures, with the ability to drive out competing discourses through steadfastly ignoring them or, more insidiously, appropriating and accommodating potentially threatening agendas such as sustainable development to fit the business-as-usual paradigm. The emerging green business orthodoxy has done little to challenge this hegemonic power; indeed, this body of theory may have skilled business with green rhetoric, symbolism, and semiotic codes that contribute to the more complete capture of the concept of sustainable development (Fineman, 1997; Livesey, 2001).

The *maneggiare* approach implied in much orthodox management theory tends to present a self-supporting ideology that indicates that senior managers are a highly important group whose actions are normally presumed to

support the social good. In this paradigm, problems are generally considered amenable to rational solutions, and the distinction between *managers* and *managed* (whether the environment or people) is taken for granted. The theory of a hierarchical, technical, and politically neutral process of managing is thus sanitized. Whereas politically charged and value-laden contexts are largely ignored within some subdisciplines and functions of business management, other forms of knowledge are deemed subjective or subversive (Alvesson & Willmott, 1996). Corporate managers themselves describe systems as “very centralized,” with “hierarchical individualism” operating to reproduce the existing socioeconomic arrangements as well as executive power (Fineman, 1997; Mayhew, 1997).

Critical theorists as well as increasing numbers of management scholars accept that management is a social construction imbued with political motives. The assumption that the dominant rational positivistic paradigm that underlies management theory is necessarily robust is being questioned. The threat that a major paradigm shift such as sustainable development represents could nevertheless result in power being clung to and exercised ever more forcefully—as the sustainable development agenda profoundly challenges the control on which the management ethos is founded. Deconstruction of management policies reveals that hierarchical corporate bureaucracy still prevents real change taking place, despite the plethora of “new” theories (Fineman, 1997), and the modernist agenda of management still relies on the instrumentalization of nature and people through the power of scientific-technical knowledge modeled on the positivism of the sciences (Alvesson & Deetz, 1996). Modern management orthodoxy has failed to challenge the normative conception of capitalist development (Hudson & Weaver, 1997) or to address issues of equity, equality, and futurity as a radical conception of sustainable development demands (Welford, 1995).

These are some of the dilemmas of orthodox management, with its origins in scientific rationalism and positivism and its methods rooted in control. This ideology represents barriers to more serious engagement with sustainable development, beyond attempts to exert traditional management control over the concept—as has been witnessed in the business shift to eco-modernism and its accommodation of the environmental problematic within a *maneggiare* approach. Such actions have tended to deflect or disguise demands for more radical change, with business attempting to control the meaning of greening (Levy, 1997). For business and management theory to undergo the major transformation that sustainable development calls for challenges the “hegemonic coalition” of business, government, professions, and intellectual elites (Levy, 1997).

Not only have management academics engaged a critical perspective in an increasing amount of published research in recent years, critical theory has had some appeal for teaching praxis as well (see Mills & Simmons, 1995; Reynolds, 1998, 1999). The *Journal of Management Education* recognized the relevance of critical theory for management education in a special segment in August 1997 (see Prasad & Caproni and accompanying articles). At a time when sustainable development calls for radical change, we see the potential of critical theory in changing the lens through which we have traditionally viewed business, its responsibilities, and its modus operandi. According to Prasad and Caproni (1997), critical theory offers

a fundamentally different perspective of management and organizations, one that virtually overturns traditional conceptions of employment relations, managerial goals, and organizational effectiveness. Most important, critical theory is deeply committed to the emancipatory potential of management and organizations. Thus it is also deeply committed to understanding how the everyday practice of scholars, educators, students, managers, and workers advances and inhibits this potential. (p. 284)

A number of key concepts from critical theory inform our teaching praxis and form part of the critical skill-set we seek to develop in our students. While recognizing that noted critical theorists themselves differ on fundamental philosophical and methodological issues, we distill just three main aspects of a critical skill-set that we have found useful in bridging between the managerial and more radical paradigms. These concepts are reflexivity, critique, and social action/engagement.

Reflexivity, according to Hardy and Palmer (1999), “refers to the importance of reflecting on the assumptions that we make in producing what we regard as knowledge” (p. 381). As reflexive practitioners, managers and workers can begin to appreciate how particular realities are constructed and their part in that process. A critical education for sustainability thus involves students thinking through both personal and broader societal values and ethics and how these might have impact on management decisions. Allied to reflexivity on both these levels is a fuller acceptance of systemic interconnection as advocated by Roome (1994) and Starik and Rands (1995). Systems thinking is key to understanding and resolving problems emanating from the complex interdependence of individual, social, cultural, economic, and political activities and the biosphere. In decentering the (business) organization, we move to consider more broadly the processes and systems implicated in production and consumption and the roles of a variety of institutional and organizational forms in balancing the needs of peoples and resources. Stu-

dents can be asked to think about how they make their own purchase and consumption decisions. Do they read product labels? Do they know what the products they buy and use are made of and what ethical choices are made in the sourcing, manufacture, marketing, and sale of these products?

Critique involves an explicit focus on power and ideology. Critical theory takes the position that the way reality is constructed is significantly influenced by the power relations within particular cultural settings. We alluded earlier to business playing a central role in shaping sustainability discourse along with some of the specific power effects this situation implies. A focus on critique invites students to recognize issues of self-interest and legitimation. We are thus challenged to explore further alternative means of organizing that advance greater democracy and equality. Students can be asked to think about particular organizations' locational choices for their manufacturing facilities, the business rationale for sustainability values reports and their uses, and the ways in which businesses can engage with stakeholders in more meaningful ways that extend beyond stakeholder management.

Social action/engagement—often referred to in the literature as praxis—is an important aspect of critical theory. Reflexivity and critique are employed not just for their own sake but with an overall emancipatory intent that embraces the possibility of radical change. A key part of working out new possibilities for organizing and acting is to be able to resolve tensions between the collectivity and the individual in ways that support both. Welford (2000) points out that this approach stresses the need for new social contracts and relationships between, in the organizational case, owners, managers, and workers, as well as other stakeholders. Facilitative skills in collaboration and adaptation and a level of ease with more inclusive approaches are thus important aspects in any social action. Here, students can be asked to think what they could do to act in ways that are more sustainable, how they can facilitate their homes, communities, and organizations they are involved with to become more sustainable, and what actions they could take locally and professionally as potential change agents.

This critical skill-set represents by no means all of the many underpinning and often complex ideas within critical theory. It does, however, provide a framework for introducing both weaker and stronger forms of sustainability. We are thus able to focus attention in our classes on the practical ways of achieving the former through the use of existing tools and approaches (including, for example, cleaner production, ecoefficiency, and environmental management systems). The critical theory perspective allows us to see these tools and approaches as essential but insufficient initiatives through an understanding of the ideological bases from which they derive. Utilizing a

critical theory perspective also allows us to explore the possibilities afforded by stronger forms of sustainability through the radical change perspective as well as understand the potential and limitations of current weaker forms.

FRAMING COURSES INFORMED BY CRITICAL THEORY

This more practical contribution of our article describes how we construct our environmental management/sustainability classes that promote the critical skill-set outlined above. It is not necessary to be an expert in critical theory to engage in the practical exercises we outline. Indeed, we ourselves did not start out with the depth of understanding we could now claim. Rather than teaching large amounts of critical theory up front, we draw concepts from critical theory as required throughout the course, inviting a dialectical and discursive approach to course content. We assist students to search out internal contradictions and gaps in a system of thought (or discourse) and push these contradictions to the point where something different emerges, so that they can begin to see where possibilities for change might lie and where one might take action. We encourage students to explore complex concepts from critical theory in more depth, as they feel the need, perhaps in gaining credit for assessment or in informing class debate.

In framing environmental management/sustainability electives informed by critical theory, we begin by reflecting on what it is that we most want to sustain. Introducing students to the possibility of stronger forms of sustainability means, if successful, we have inspired an interest in thinking about issues and possibilities connected with sustainability well beyond the course timeframe. We most want to sustain students' learning, and we believe we can do so through their ongoing application of the critical skills we teach in areas in which knowledge is constantly evolving—a situation that makes a tools-only-based approach to course content likely to be quickly outdated. Involving students in meaningful learning at a personal level is key to retaining their interest. We have evidence of previous students' interest and learning passed on to others outside our courses and their application of this learning in business situations, sometimes well after the course has been completed. We are comfortable with the idea of promoting learning networks, whether through meetings or electronically and as acting as a resource for former students.

Informed by the McLuhan argument that “the medium is the message,” we subscribe to the notion that the method of instruction must be consistent with curriculum content. How can our teaching and our courses (and the wider

university) model sustainability? For us, the sustainability-promoting culture requires some relinquishing of control and facilitating a learning environment where there will be some rules (some of which are university policy and some of which can be consensually agreed) but also some freedom for students to engage in defining appropriate learning goals and assessment activities for themselves. Thus, like organizations, our courses work within a regulatory framework that, in our case, refers to hand-in times and places for assignments, penalties for lateness, plagiarism, and so on. We retain some compulsory assessment items, major components of which must be completed on an individual basis so as to allow for individual assessment to take place. Our focus on both compulsion and individualism has diminished considerably. We also favor, where possible, a voluntarist framework that allows for more student choice and flexibility in their assessment regime (choices as to assessment topics and due dates). This approach involves resolving the needs of the collective (to cover particular topics according to some logical sequence) and the needs of the individual (to focus and balance their workload). Such a framework also provides for students to engage in collaborative and, indeed, extra work graded on a pro rata basis where individuals seek such opportunities. Individual learning contracts can help us track what has been agreed upon.

Equally, in framing a course internally consistent with ideas about sustainability, we can take a stakeholder approach to course and individual learning development. Many course leaders probably utilize such an approach, at least to some extent, in consulting interested parties around new course development, in asking course participants what they expect to gain, and in integrating suggestions from evaluations, where appropriate, into future courses. We can go further and actually engage students in the process of consulting and reporting on other stakeholders' views so as to co-construct specific aspects of the course and of individual learning contracts—in terms of what is seen as most useful. In its simplest form, we would ask students to consider who the stakeholders for the course were. Their list might include potential employers, guest lecturers, and others involved with environmental management administration, research, or education and could also extend to people in students' own organizations or living situations. A plan is then agreed upon for consulting stakeholders as to what they see as important outcomes for either the course or the individual student—and the students report on how stakeholder suggestions might be implemented in such a way as to effectively balance the needs of all parties. An additional outcome is that students make connections outside the course, where they might usefully focus their assignments and offer some of the benefits of their learning. The process of stake-

holder engagement becomes much richer when it brings benefits to more than just one side of the arrangement. Interested students also participate in organizations that can support them beyond the course—in the local environmental business network, in seminars, conferences, and business fora, and in electronic networks.

A more minor but importantly symbolic aspect of organizing education for sustainability is to practice what we preach within our courses in terms of focusing on nonmaterial means of meeting nonmaterial needs. We ourselves try to model and encourage students to adopt this approach or, at the very least, discuss the trade-offs involved. Our use of material resources in the course must thus be conservative—heating, air-conditioning, lighting, and paper use are obvious candidates for reduction—even when such demands conflict with entrenched organizational routines. We have followed the trend toward electronic presentations and raised questions about the use of paper in student seminar handouts, many of which—when an expectation is agreed on between the class—do not need to extend to more than one double-sided page. This vigilant attitude to the use of resources tends to raise students' awareness of how the university operates on a larger scale and has led to student action on waste, recycling, and purchasing practices. It also translates into their living situations, and students have many stories to tell about their efforts to convert others.

In establishing a critical approach to the course study, we introduce students to a very wide range of reading, crossing disciplines in a manner that is usually quite new to them. They soon discover, however, that the complex and holistic concept of sustainable development requires more than a narrow disciplinary approach to developing their own awareness and knowledge base, and they come to enjoy the challenge of a more discursive approach. They read differing accounts of institutions such as the World Bank, the IMF, and the WTO and their origins and impacts. They take in positions from environmental economics, indigenous views on sustainability, and the capitalist political economy, and they debate these with each other and with visiting lecturers who represent a variety of positions and views. They become familiar with the emerging “green” business theory and also critique this in terms of whether it represents major change or what Levy (1997) calls “political sustainability.” They become adept at finding material and presenting the positions discovered—including those of critical theorists—as part of class discussions. They often comment that they have never read so widely before and on the ideological understandings these readings bring.

This focus on broadening perspectives is tempered by reflexivity as to personal and local relevance. With empowerment and emancipation established

as goals from the outset, students are invited to talk about their own experience and understanding of environmental and social issues that business needs to take into account. Their own interests and goals are to be incorporated into the course, and the importance of their own engagement and responsibility in the course is emphasized. They are invited to critique course content and methods from the outset and to enrich the course by bringing to it their own thoughts and discoveries over time, an addition to formal evaluations at the end of the course.

A key way in which we bring concepts from critical theory into our courses is by focusing on exercises designed to empower students to become active participants in setting their own learning goals and in assessing their own progress and to emancipate them from a dependency on top-down, authoritarian approaches. We provide a selection of possible exercises below in an order consistent with the critical theory skill-set we outlined earlier. We start with a focus on individual experiences of the world, move to understanding and critique of broader societal structures and discourses, and then generally proceed to informed social action/engagement toward the end of our courses. In practice, there is often some overlap in the skill sequence.

POSSIBLE CLASS EXERCISES PROMOTING CRITICAL SKILLS

Continuum. A good exercise to establish the course climate is the continuum, undertaken at the first meeting. Students are invited to assess their own level of environmental awareness and goals for the course. An invisible line crossing the room diagonally is described as ranging from a lower level of environmental awareness and understanding at one end, to a reasonably developed level of awareness at the other end. It is important not to attach connotations of failure to the low level of the continuum—it is emphasized that we are all on a learning journey. The course leader enacts what different points on the continuum might signify:

I'm standing right at this end of the line, and for me that means that I am sympathetic to the environmental cause but never really got involved myself . . . Here, I'm standing about a third of the way along the line. That's because I read about environmental issues in New Zealand, and I'm concerned about the amount of forest we cut down, and I think we have to do more about conserving our clean, green image . . . I'm about three quarters of the way along the line now. I did an economics course that introduced me to environmental concepts, and I belong to the university environmental group that has been looking at waste and carpooling, but I see problems in actual implementation.

Students take their positions on the continuum and are asked to think about what that position signifies for them and discuss that with the person nearest to them. The course leader then takes feedback from students at different points on the continuum—“Mary, tell me about where you are standing on the line. What is that saying to me?”—and explores the significance of these initial positions. Students are invited to consider shifting position in light of what they have heard from others and to explain why they might have done so.

Students are then invited to envision their position on the line by the end of the course, to move to that new position, and to talk about what the shift signifies in terms of goals set and the kinds of learning and experience that will get them there. Repeating the exercise at the end of the course can also work well. This exercise clearly promotes reflexivity. Students are encouraged to take control of their own learning, setting their own goals and assessing whether they attain those goals. The exercise also sets the scene for later ideological critique of various business positions along similar continua from anthropocentrism to ecocentrism (or from weaker to stronger forms of sustainability).

Timeline. Another exercise early on in the course is to set the study undertaken within a historical framework. This exercise can be used to demonstrate how values change over time—an important perspective for understanding the precepts of business and sustainable development, where major and seemingly overwhelming change is what has to be considered. We go back to changes that took place as a result of the scientific and industrial revolutions and their effects, considering the shift away from an organic relationship with nature and the birth of modernity. A timeline can be provided to enable students to consider the major impacts on the environment and on people. Students are invited to add to the timeline and mark in key points in their own lives. Beside setting context, the exercise develops reflexivity and is enabling in that it encourages students to share, inquire, and comment. Through critique, students begin to draw the veil from some taken-for-granted attitudes and beliefs that have become reified—they come to understand how many of these things have been constructed—and are encouraged to consider current issues more critically and on a longer time scale.

Site visits. We strongly encourage students to participate in the selection of site visits or visitors. These events give classes a local flavor and can provide avenues for informed social action/engagement. We give the example of a class trip to the local landfill, which was devised after discussions revealed

that in this particular intake, few students considered themselves to have had much organizational experience of environmentalism or social change initiatives. A few students expressed personal frustrations with the local municipality's low levels of provision for recycling as opposed to other places they had lived or spent time in. Preparing for "the trip to the tip" involved watching videos about waste management alternatives, researching the political decisions that led to the current waste management regime locally, and devising questions to put to the CEO of the waste management company. It was found that company economics for the large local landfill facility relied on trucking in large amounts of waste from other areas and the local council being penalized if, at the time it was negotiated, it contributed less than a certain, liberally assessed amount of waste each year. Clearly running throughout students' minds through this example was an assessment of their individual and our own collective contribution to the state of the planet as consumers, and hence as coproducers of waste, but also in this case of their apparent naivete of the dimensions of the challenge presented by an embedded regime even within a local democracy. Waste is an issue in which we are personally implicated and that has ethical, political, economic, managerial, as well as obviously ecological dimensions with which we might engage given sufficient motivation. A class member participated as a student representative on the local municipality's waste management task force charged with developing a waste management strategy for the city. Others ran a bulletin board soliciting postings for ideas to reduce waste within student flats, and another chose to write a case study on a student hostel, focusing largely on changing student attitudes concerning waste as part of a wider sustainability challenge. Many questioned the need for unnecessary packaging in store-bought products, and some began to refuse or return them. Such site visit activities show students' taking responsibility for their own learning, engaging in reflexivity and informed critique of a variety of business/economic, societal, political, and ecological discourses on waste, and in this example as well, engaging in social action, albeit on a small scale.

Mind-mapping. We tend to use this exercise at the end of the course to help students understand the progress they have made. Strict adherence to the formal process of cognitive mapping is not necessary. Students are invited to reflect on their journey, to consider any highlights, any ways in which their thinking and actions have changed, and any aspects of the course they would change. They can represent this journey in pictorial form, by flow chart, or by diagram—whichever mode suits them. Many choose to present an extended drawing that includes key events and ideas that have challenged them and transformations they have experienced. Mind-mapping can prove to be a

powerful exercise, and a humbling one for us as course leaders, as students talk in quite intimate ways about significant impacts they have experienced during the course. These frequently have to do with the stripping away of false consciousness about how the world operates, about how power is used and abused, about asymmetrical power relations that trap some in poverty and powerlessness, and about the political nature of concepts such as sustainable development. Students come to understand their own empowerment and choices through having engaged in reflexivity and critique, and some determine that the future holds a change-agent role for them, though they are more aware of the challenges and difficulties they may face.

Campus and community action. Where possible, in addition to examining best and worse practice cases from around the world, and in line with ideas on local action implicit in sustainable development and critical theory, we advocate focusing on real-world problem solving on campus and within the larger community. An example of on-campus learning is one where we challenge students to work in small groups in class to design a process by which the university could rethink its environmental policy in terms of sustainability and to outline the expected major dimensions of the policy that could be developed. The exercise focuses students' attention locally—on local issues and problems, on an organization with which they are familiar and in which they could begin to make a difference. It focuses attention on more innovative possibilities beyond those they currently experience. We employ a second example at the end of the course. Students who might have risked becoming perhaps overly optimistic about the immediate prospects for stronger forms of sustainability—or even pessimistic given a penchant for ideological critique without seeing possibilities for change—are encouraged to research a local organization (or network of organizations) and examine potential for enhanced sustainability. They prepare a report, presentation, or set of Web pages that the organizations would find helpful or challenging (we leave the students to make this call) in response to the contribution made by the organization(s) in providing assistance with data for the student project. We see the development of something the organization could find useful—an important component of sustaining university-community relations—as typifying responsible social action appropriate to the kind of contribution we and our students might make as responsible researchers and management consultants, both immediately and in the future. They learn firsthand of the difficulties in convincing others to accept their ideas—and how ideals do not translate easily into practice. This final piece of course assessment provides an opportunity to bring together a range of learning from the course, both practical (for we certainly do not advocate throwing out useful tools and

frameworks) and one based on critical theory that exposes possibilities for new kinds of action.

CONCLUSIONS

The content of what we teach in courses on environmental management and sustainability reflects a complex mix of values that ultimately align with weaker or with stronger forms of sustainability. In this article, we have sought to outline a critical skill-set—three key conjunctive skills derived from critical theory that enable thinking and action more in line with the values and understandings seen as appropriate for moving toward stronger sustainability. We have provided components of course design and examples of exercises that can be used to develop students' skills in reflexivity, critique, and social action/engagement.

Course leaders do not have to be experts in critical theory to introduce a critical perspective in an environmental management/sustainability elective. Teaching the more functionalist elements of environmental management, with a focus on incremental improvements through the use of tools and frameworks, remains a central part of our courses. Students have to work in the real world, where they are expected to understand such approaches. However, applying the critical skill-set provides us a way of exploring and understanding our own roles and choices as educators, students, managers, and workers, as well as taken-for-granted interests and structures in business's adoption of weaker forms of sustainability. Seeing the benefits, but also the limitations, inherent in a tools-based approach opens us to the possibilities for both personal and social change that is integral to stronger forms of sustainability. We have found that critical theory can be used as a conceptual toolbox from which ideas can be drawn to produce deeper understandings of ourselves and our society, as issues and questions arise in the course.

Using a critical perspective is different from the mainstream tools-only-based approaches to environmental management teaching because it offers a theoretically sound means of bridging weaker and stronger paradigms of sustainability. Learning for sustainability requires that we do not overprivilege management control (the *maneggiare* paradigm) but rather focus on the ideologies in which such notions and processes are embedded and their constitutive power over the ways in which our lives are shaped. A critical education empowers learners to participate in a democratic transformation of society. We believe there is potential both within and beyond the timescale of single-course iterations to contribute to more sustainable organizing, consumption decisions, lifestyles, and communities.

Note

1. Content for business school electives on environmental management and sustainability can be derived from an increasing array of good texts and readers depending on the course focus or from a variety of course syllabi available online. See, for example, http://www.secondnature.org/resource_center/resource_centre.html and <http://www.rit.edu/~slrbbu/syllabi.html>.

References

- Alvesson, M., & Deetz, S. (1996). Critical theory and postmodernism approaches to organizational studies. In S. R. Clegg, C. Hardy, & W. R. Nord (Eds.), *Handbook of organization studies* (pp. 191-217). London: Sage.
- Alvesson, M., & Willmott, H. (1992). *Critical management studies*. London: Sage.
- Alvesson, M., & Willmott, H. (1996). *Making sense of management: A critical introduction*. London: Sage.
- Daly, H. (1996). *Beyond growth: The economics of sustainable development*. Boston: Beacon.
- Day, R. M., & Arnold, M. B. (1998). The business case for sustainable development. *Greener Management International*, 23, 69-92.
- The Ecologist*. (1993). Whose common future? London: Earthscan.
- Ehrenfeld, J. R. (1999). Cultural structure and the challenge of sustainability. In K. Sexton, A. A. Marcus, K. W. Easter, & T. D. Burkhardt (Eds.), *Better environmental decisions: Strategies for governments, businesses and communities* (pp. 223-244). Washington, DC: Island Press.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone.
- Elkington, J. (2001). *The chrysalis economy: How citizen CEOs and corporations can fuse values and value creation*. London: Capstone.
- Fineman, S. (1997). Constructing the green manager. *British Journal of Management*, 8(1), 31-38.
- Hardy, C., & Palmer, I. (1999). Pedagogical practice and postmodernist ideas. *Journal of Management Education*, 23(4), 377-395.
- Harvey, D. (1996). *Justice, nature and the geography of difference*. Oxford: Blackwell.
- Hudson, R., & Weaver, P. M. (1997). In search of employment creation via environmental valorisation: Exploring a possible eco-Keynesian future for Europe. *Environment and Planning*, 29, 1647-1661.
- International Institute for Sustainable Development (IISD). (1992). *Business strategy for sustainable development*. Winnipeg: ISSD.
- Levy, D. (1997). Environmental management as political sustainability. *Organization and Environment*, 10(2), 126-147.
- Livesey, S. (2001). Eco-identity as discursive struggle: Royal Dutch/Shell, Brent Spar and Nigeria. *Journal of Business Communication*, 30(1), 58-91.
- Mayhew, N. (1997). Fading to grey: The use and abuse of corporate executives' "representational power." In R. Welford (Ed.), *Hijacking environmentalism: Corporate responses to sustainable development* (pp. 63-95). London: Earthscan.
- Mills, A. J., & Simmons, T. (1995). *Reading organizational theory: A critical approach*. Toronto, Canada: Garamond.
- O'Riordan, T. (1991). *Environmentalism*. London: Pion.
- Pearce, D., Markandya, A., & Barbier, E. (1989). *Blueprint for a green economy*. London: Earthscan.

- Porter, M., & van der Linde, C. (1995). Green and competitive: Ending the stalemate. *Harvard Business Review*, 73(5), 120-129.
- Prasad, P., & Caproni, P. J. (1997). Critical theory in the management classroom. *Journal of Management Education*, 21(3), 284-291.
- Reynolds, M. (1998). Reflection and critical reflection in management learning. *Management Learning*, 29(2), 183-200.
- Reynolds, M. (1999). Critical reflection and management education: Rehabilitating less hierarchical approaches. *Journal of Management Education*, 23(5), 537-553.
- Roome, N. J. (1994). *The environmental agenda—Taking responsibility: Management and business*. London: Pluto.
- Roome, N. J. (1998). Conclusion: Implications for management practice, education, and research. In N. J. Roome (Ed.), *Sustainability strategies for industry: The future of corporate practice* (pp. 259-276). Washington, DC: Island Press.
- Shrivastava, P., & Hart, S. (1995). Creating sustainable corporations. *Business Strategy and the Environment*, 4, 154-165.
- Springett, D. V. (2002). Business conceptions of sustainable development—A perspective from critical theory. In *Business strategy and the environment conference proceedings* (pp. 389-399). Manchester, UK: Manchester University Press.
- Springett, D. V., & Kearins, K. (2001). Gaining legitimacy? Sustainable development in business school curricula. *Sustainable Development*, 9(4), 213-221.
- Starik, M., & Rands, G. (1995). Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations. *Academy of Management Review*, 20(4), 908-935.
- Turner, R. K. (Ed.). (1993). *Sustainable environmental economics and management: Principles and practice*. London: Belhaven.
- Welford, R. (1995). *Environmental strategy and sustainable development: The challenge for the 21st century*. London: Routledge.
- Welford, R. (Ed.). (1997a). *Corporate environmental management 2: Culture and organizations*. London: Earthscan.
- Welford, R. (Ed.). (1997b). *Hijacking environmentalism: Corporate responses to sustainable development*. London: Earthscan.
- Welford, R. (1998). Editorial: Corporate environmental management, technology and sustainable development: Postmodern perspectives and the need for a critical research agenda. *Business Strategy and the Environment*, 7, 1-12.
- Welford, R. (2000). *Corporate environmental management 3: Towards sustainable development*. London: Earthscan.
- World Commission on Environment and Development (WCED). (1987). *Our common future (the Brundtland report)*. Oxford, UK: Oxford University Press.