Abstract

We are living in an era of market-driven, globalised economies characterised by reduced public investments in what, until now, have been considered public goods and services. In Australia and elsewhere, education, and higher education in particular, has seen steady declines in government funding. This has prompted universities to become much more entrepreneurial and to seek out new funding opportunities to support their teaching and research activities. This paper reflects on the personal and professional dilemmas and challenges we faced as two early career environmental education researchers who were commissioned to undertake research for a private corporation. As a result of issues raised during this process, we engaged in a critical reflection of our perceptions and feelings about our involvement in the project. In essence, dilemmas and challenges centred around two issues: (1) control/ownership of the research; and (2) the clash between corporate and university values. This paper explores these issues and suggests that greater mindfulness on the part of individual researchers as well as the development of better university-corporate partnership processes and protocols might provide useful starting points for overcoming such dilemmas and for moving forward with university-corporate research partnerships.

Key words

globalisation, commercialisation, higher education, environmental education research, university-corporation partnerships, values, ethics, ownership, early career researchers
Introduction
In the current era of market-driven, globalised economies characterised by reduced public investments in public goods and services, education, and higher education in particular, has seen steady declines in government funding. Universities have thus become much more entrepreneurial in seeking out new funding opportunities. This paper reflects on personal and professional dilemmas and challenges faced by two early career environmental education researchers who were commissioned to undertake research for a private corporation. These centred around two issues: (1) control/ownership of the research; and (2) the clash between corporate and university values. This paper explores these issues and dilemmas and suggests possibilities for overcoming or ameliorating the worst effects of these.

The changing circumstances of higher education research
Higher education has never been exempt from the broad sweeps of social, economic and, now, global change. In the early twentieth century higher education opened up to admit women students; through the 1970s changed social attitudes expanded the number of universities and provided free university education for the many rather than the few; and through the 1980s the beginnings of ‘user-pays’ sentiments led to the introduction of partial fees in Australia. Now, in the early 21st century, the information-based, globalised economy has accentuated these processes, creating a new wave of changes. On the one hand, these reflect a more central role for universities in the ‘knowledge economy’. On the other, they are ushering in radical transformations of the relationships universities have to the polity, to society, and to business; to the structure and funding of university systems; and to the academic profession and what constitutes its work (Finkelstein, 2003).

Australian universities are as much a part of these global processes as are comparable universities, for instance in the United States, Great Britain, Canada, the Scandinavian countries and Japan. It is apparent that globalisation provides many opportunities – greater cross-national, cross-regional and cross-discipline interactions and partnerships; potentially more responsive teaching and learning systems including flexible delivery and virtual programs; and opportunities for research with new partners working on novel problems or bringing innovative perspectives to old ones. Other changes, however, are barely developed and scarcely understood. For example,
the impacts of the emergence of new kinds of executive leadership in universities with more power, less room to manoeuvre, and run by performance standards, incentives, targets and plans are not yet fully understood. In addition, new corporate structures that tend to disenfranchise collegial views and structures; the partial breakdown of traditional disciplinary structures; increased work intensification with greater call on part-time and casual employees; and changes in the funding and culture of academic research are also having unforeseen impacts (Marginson, 2000; McWilliam, 2002; Sharma, 2005; Slaughter, Archerd, & Campbell, 2004). It is the impact of such changes that provides the context for the case that is described and critiqued in this paper.

Specifically, the impact of new ways in which university research is funded is of central concern. In a climate of diminishing public funding, universities seek to increase their general funds through expanding revenues from properties and investments, bequests and donations, and by expanding commercial research and consultancies, increasingly in partnership with profit-driven corporations (Bowie, 1994). The business sector generally advocates such partnerships, with recent headlines in *The Australian* newspaper’s Higher Education Supplement proclaiming “Better business, uni linked needed” (Macnamara & Armitage, 2006). Universities, however, have been accused of laggardly progress towards creating greater industry partnerships, with the slowness of university structural reform seen as a barrier. This perception is exemplified in the comment by the chief executive of the Australian Institute of Commercialisation that “a lot of universities would not be able to say what their objectives were in pursuing commercialisation” (Macnamara & Armitage, 2006).

Slowness to take up market opportunities in research is, however, not just a matter of working through the rigidities of large university bureaucracies. As Hurmelinna (2004) argues, industry and academia have generally evolved as two distinct worlds, “with rare points of contact with each other” (p. 4). While strong arguments can be made for closer ties between universities and corporations – for example research by medical specialists funded by pharmaceutical companies has been responsible for many significant advances in clinical practice, (Henry et al., 2005) - there is equally strong concern about the risks of closer associations between the corporate sector and
universities. Fulop and Couchman (2006), for example, look at commercialisation as ‘risky business’ from a business and financial point of view. They apply the following definition of risk to university-industry research and development partnerships: “the possibility that actions pursued within a partnership can go wrong, or not according to plan, resulting in some cost or other adverse consequence to one or more of the partnerships” (p.166). According to Fulop and Couchman (2006), a major reason for business to be enthusiastic for partnering is to minimise the costs and risks associated with high levels of uncertainty around research and development, with collaboration often seen as a ‘de-risking’ strategy. From a university’s perspective, however, this may represent a transfer of risks towards the university. For a business, for example, research and development investments are likely to represent fairly insignificant amounts compared to its overall budget, and any losses can often be written off as tax deductions. For a university, however, research is a fundamental component of their core business. Therefore, committing resources to a venture is likely to have higher potential impacts if it fails or even goes just a little bit wrong - especially in times of financial constraint. In addition, there is often a cost advantage for business in undertaking university-corporate research partnerships because the labour of graduates and postgraduate researchers is often significantly under-priced - if priced at all. This represents a significant subsidy to the corporation and a major cost disadvantage to the university.

For most academics, though, the risks associated with university-corporate partnerships are expressed more as concerns that impact directly on their work. These seem to fall into two categories: ‘conflict of interest’ issues, that is, conflicts that cause errors in judgement or methodology, suppression of results, contested ownership of intellectual property, or even outright fraud (Rai, 2004; Resnik, 2000); and ‘conflict of commitment’ issues, that is, use of industry-related research activities to prioritise and allocate away from ‘normal’ academic duties, leading to under-commitment to students, and divisions and conflicts within academic work groups (Bok, 2004; Campbell, 1997).

In Australia and elsewhere – and across a broad range of disciplines - many academics and commentators (Giroux, 2003; Handscombe & Patterson, 2000; Marginson, 2000) believe that these conflicts are the result of fundamental differences
in the values, purposes, ways of working and desired outcomes of corporate and university cultures. There are apparent contrary positions between, for example, universities’ and researchers’ needs to publish their research results, and corporations need to conceal findings either to maximise competitive advantage or to suppress findings that might impact negatively on market position and/or performance. In addition, universities engage in research ‘for the public good’ while corporations engage in research to improve or consolidate their market share. However, some argue that the corporate world and the academic world do not have to be mutually exclusive (Marginson, 2000) and that the academy is able to accommodate sustained interaction with industry without a complete compromise of academic values - values encapsulated in the Mertonian view that sees science, and universities doing scientific research, as “value-free” (Omenn, 1983 cited in Behrens & Gray, 2001; Merton 1942/1973 cited in Slaughter et al., 2004).

Others, however, believe there is a one-sided acculturation process occurring and that this is slanted in favour of corporations. Giroux (2003), for example, makes the claim that “as a result of the corporate takeover of public life, the maintenance of democratic public spheres from which to organise the energies of a moral vision loses all relevance” (p. 183). Furthermore, Giroux (2003) states that “the modelling of higher education after corporate principles and the partnerships they create with the business community does more than reorient the purpose and meaning of higher education; such reforms also instrumentalize the curricula and narrow what it means to extend knowledge to broader social concerns” (p. 187). These are some of the conundrums that emerged for us as early career researchers in our first efforts to undertake research with and for a corporation.

Stepping into the world of corporate research partnerships
In 2005, as early career education researchers with a focus on education for sustainability, we were encouraged to be part of a cross-disciplinary research team that was involved in two research projects with a large land development and property management corporation. This corporation is one of the largest of its kind in Australia, managing a large share of Australia’s commercial properties, with a property portfolio of over $A4 billion. It also has an impressive list of green credentials and green awards to its name with a number of ‘sustainable communities’
projects in development or in the pipeline. In addition, this corporation is involved in retrofitting commercial properties in the central business districts of major capital cities, and has recently begun to engage with the residential property market through the development of ‘greenfield’ master-planned residential communities in a major Australian urban growth area.

The two research projects we were approached to undertake were part of a much larger research agreement between the corporation and another faculty’s research centre within our university. At a broad level, we were ‘strongly encouraged’ to undertake the projects by our Faculty, in effect, to help show that the Faculty was capable of, and willing to, undertake both interdisciplinary and commercial research. Specifically, the projects we were asked to engage with sought to provide the corporation with strategies and resources for better educating their clients and potential clients about the sustainability features of their commercial and residential properties. Initially, the research purpose was not quite this clear, but became so once we had committed ourselves to involvement in the enterprise.

There were a number of facets to the research projects. These included educating tenants and owners, both potential and actual, about:

- the existing sustainable design features of buildings owned or managed by the corporation, such as grey water usage and ‘green’ energy;
- the social sustainability design features of the commercial buildings and residential developments such as the use of green spaces, cul-de-sacs, and ‘town hall’-style community facilities;
- the unique historical features of the residential sites such as Aboriginal rock paintings and early-settler artefacts; and
- why leasing or purchasing these properties would help tenants or owners to actively engage in creating a sustainable future.

Part of our brief also included finding out – through survey and interviews - what potential clients’ existing understandings were about sustainable living, and to identify the kinds of strategies they believed would be most effective for them to learn more about, and be convinced of, the value of sustainable commercial buildings and residential housing developments.
After substantial investments of time and effort – along with considerable frustration - our experiences as researchers in this venture led to growing unease and later soul searching as to the worth, efficacy and value of these research projects, and our involvement in them. It became apparent, for example, that we were being asked to undertake research about the sustainable design features of buildings, about how the company was addressing social sustainability issues, and about why leasing and/or purchasing properties from this company would help tenants and purchasers to actively engage in building a sustainable future. As environmental education academics, this focus did not sit well with our orientation to education for the environment, and our belief in the power of this to contribute to the development of a sustainable society. Nor did this focus sit well with our commitment to the ‘public good’ aspect of research. At the heart of our concerns was the idea that, as Giroux (2003) has so aptly commented, “the corporate model of research instrumentalizes knowledge and undermines forms of theorising, pedagogy, and meaning that define higher education as a public good rather than as a private good” (p. 188).

Reflecting on our experiences
As researchers, and as reflective educators, we decided to capture our experiences of what was, for us, this new domain of working with/for a ‘corporate partner’. Hence, in addition to the research required specifically for the corporation, we also began to record and reflect on our perceptions and experiences as researchers working for a corporation. This meta-study, which took place over a six-month period, involved an analysis of our meetings, conversations and research diary notes; discussions with key informants; and detailed conversations between ourselves. Our analysis was framed by the literature that we began to seek out, some of which is highlighted in this paper. The remainder of this paper outlines and reflects on the dilemmas and challenges that we faced and have now been able to articulate. In effect, two main challenges emerged, categorised into the following issues: (1) control of the research agenda; and (2) the clash between corporate and university values.

(1) Control of the research agenda
As noted earlier, universities are increasingly engaging in research and consultancy partnerships with corporations. However, research commissioned by a corporation means just that – they drive the research agenda. Understanding this - and
experiencing a new feeling of ‘lack of control’ over the research direction - was the first challenge we faced. We experienced this very early on, when first approached to undertake the research from within the university itself. As another faculty’s research centre – based on a different campus - had already negotiated the research project with the corporation, we were simply a part of a very broadly scoped small project within a much larger research agenda. We thus felt ‘locked-in’ to a direction that we might not have taken had we been involved in negotiating directly with the corporation from the start. While it is true that we were interested in the focus of the research project, nevertheless, we were also strongly encouraged to participate. Thus, without us initially realising it, we were also servicing the needs of two other large organisational groups in addition to the corporation – our own faculty and the university research centre. Through our involvement, this research helped to demonstrate that our faculty could work with other faculties. At the same time, it also helped the research centre show the corporation that there was research capacity in the university and a willingness to undertake the corporations’ research, no matter how under-developed the proposal.

We were initially excited by the prospect of being involved in the two research projects, precisely because it was across faculties and because it was for a corporation that did not ordinarily engage in ‘education’. Soon after starting work on the project, however, it became clear that the corporation’s understanding of research – and of education - differed from ours. Research for the corporation was measured in terms of the product we could deliver to enhance sales, rather than in terms of the knowledge-building capabilities of research findings that we were used to. Ultimately, we came to realise that the corporation was not really interested in research and researchers who investigated possibilities, but rather in consultants who would deliver a product. As Giroux (2003) has pointed out, this is because “the corporate model of research instrumentalizes knowledge and undermines forms of theorising, pedagogy, and meaning” (p.188). This challenged not only our sense of what counts as research but also our sense of the academic as a research expert. In addition, the corporation kept changing its mind about what the product actually was that it wanted delivered; then, with a change of corporate staff, decided that they wanted a product that we were not qualified to deliver – one that sought to bring about change not through education, but
through marketing and psychological techniques. At this point, we ended our involvement with the project.

A range of issues relating to control of the research agenda are raised by our experiences. Firstly, we became acutely aware that we were operating within a context of asymmetrical power relations – both within our institution, and within the corporation. For example, we were never paid for the work we undertook for the project because we were in a convoluted, distant and powerless relationship with the research centre based outside our own faculty and campus. In addition, the research centre acted as the conduit through which we communicated with the corporation. We were thus left feeling that there were no direct lines of communication with the corporation, nor any real opportunities to negotiate the relationship. A second issue raised by our lack of control over the research agenda was the experience of being ‘re-active’ researchers, responding to others’ needs, rather than determining, or at least co-determining, the research direction ourselves. Our suggestions were listened to but were then ‘modified’, not on the basis of research findings, but to fit the corporation’s needs.

These experiences created a great sense of unease and have taught us that we need to be far more pro-active in research agenda-setting into the future, and in clearly articulating what we mean when we undertake research and when we undertake consultancies, both for ourselves and for potential corporate clients. For us, research does not have pre-conceived outcomes; consultancies do. We need this clarity not only in our dealings with corporations, but within our own universities as well. We have also reflected on what may have been the impact of our own naivety and lack of confidence – as women, and as early career researchers (Chesterman, Ross-Smith, & Peters, 2003) – in this whole process. Our experiences have led us to realise that there are times when we should just say no, despite perceived pressures from within our own university or, at the very least, to be much more circumspect about what kinds of research we choose to tackle.

(2) Clash between corporate and university values

As we have shown earlier, universities tend to engage in research for the ‘public good’ while corporations tend to engage in research in order to improve or
consolidate their market status. One of the most fundamental purposes of academic research, Hurmelinna (2004) claims, is “to ‘produce codified theories and models that explain and predict natural reality’ while business R&D is concentrated on designing and developing ‘producible and useful artefacts’ (Pavitt, 1998, p. 795)” (p. 2). These are not new concerns. Bok (1981, p. 26 cited in Behrens & Gray (2001) also comments that “programs to exploit commercial developments are likely to confuse the university’s central commitment to the pursuit of knowledge and learning by introducing into the very heart of the academic enterprise a new and powerful motive – the search for utility and commercial gain” (p. 181). However, in their pursuit of corporate funding, universities are now calling for “users [to] decide if research is relevant” (Sharma, 2005, p. 39). Such challenges to the social implications of academic research (Dozier & Lauzen, 2000) are perhaps even more pressing for us as environmental education researchers.

Thus, the second challenge we faced concerned differing perceptions of the role of research. As researchers in the area of environmental education, we have both come from a philosophical framework where improving the social and environmental good is the aim of our research. Profit is seldom viewed as an acceptable motive or means for bringing about environmental change. While we believe the corporation for whom we were undertaking this research does wish to create ‘sustainable’ communities, and wanted our research to deliver real educational experiences about sustainable living for their clients, it is also undeniable that they require these experiences to deliver tangible outcomes in the form of increased sales and profits. This proved quite a challenge for us as environmental education researchers who have tended to view the educational enterprise as somehow ‘more pure’ than the grubby world of commerce. This nexus has shaken and challenged our assumptions about the motives of corporations – and about the nature of ‘education’. On the one hand, the corporation is trying to be more ‘green’ and ‘friendly’; on the other, we felt somewhat ‘used’ as justifiers of another large housing development in a locality where open space is rapidly disappearing. These feelings of ambivalence have arisen because, as Hurmelinna (2004) has stated, the basic purposes of universities and corporations remain very different from each other. After reflection on these issues, we had to admit that some corporations do want to ‘do the right thing’ AND also make a profit.
We also discovered that we needed to engage in ‘educating’ the corporation – about research and about education. For example, we were confronted by a view of education as communication, marketing, and promotion. We thus found that we needed to start the research process by ‘deepening’ the narrow, instrumentalist views of education expressed by both the corporation personnel and our fellow non-education researchers from within our own university in order to encourage them to see the ‘public good’ aspects of the educational enterprise. This has required us to rethink our role as researchers as we have a tendency to keep our roles of educator and of researcher quite separate when undertaking research.

The potential mismatch between corporate and university values in the research projects we were working on have thus provided considerable ethical challenges for us, especially as early career researchers. Nevertheless, the sharp distinctions between university research and the practical research and development usually associated with corporations are gradually becoming more blurred. As Hurmelinna (2004) has argued, “industrial R&D is taking more scientific approaches as the importance of long-term research is understood, and on the other hand, problem solving and practical cases are recognised as relevant to university research” (p. 2). The lines between what counts as research and what counts as consultancy are, therefore, becoming more blurred.

The challenges we have outlined in this paper have led us to reflect deeply on the nature of research, the nature of education, the dual motives of corporations, and ourselves as researchers wanting to undertake research in the public interest for a private corporation which, operating as it does in a capitalist economy, has increased profits as its bottom line. Regardless of the reservations we may have about university/corporate research partnerships, the reality is that co-operation between universities and corporations will most likely intensify in coming years. Rather than avoiding such partnerships, perhaps it will be more productive for many more academics to problematise their commitment to research ‘for the public good’ in order to identify ways to overcome the challenges these new relationships with corporations pose.
Finding solutions

In a globalising environment in which knowledge-based practices and dispositions are increasingly important, education, and higher education in particular, have an important national and international role. The problem in Australia is that the undervaluing and under-resourcing of universities is happening at the very time that their value should be rising (Margison, 2000). These macro issues are pushing universities into relationships with corporations, and creating ‘border’ disputes and challenges for academics, especially as many may have originally considered involvement with the corporate sector as “dirty” or polluting (Slaughter et al., 2004, p. 159).

The reality, however, is that university-corporate liaisons are here to stay, with the push for more and stronger partnerships to intensify. While some academics, such as Giroux (2003), argue that universities should not engage in such research because it weakens the university’s capacity as a public voice, we take a more pragmatic approach. We believe that it is possible to live with the challenges by learning from our recent experience and by adopting the sound advice of others who have already experienced such dilemmas. As environmental education researchers, we must find a way for such research to be ‘win-win’, both a private and a public good. This will allow us to form new partnerships with corporate colleagues who sincerely do have social and environmental interests at heart - as well as the economic imperatives of turning a profit – but who need to identify environmentally sustainable ways to advance what they do. In so doing, we may also be able to ‘educate’ corporations.

For those of us in universities, it means we can have access to research funding and opportunities to influence corporate practices for the wellbeing of people and the environment. This means, though, that we need to become much more critically reflective about these new relationships and about how we might operate within a corporate environment. One explicit area is for universities to be much clearer about the distinctions between research and research-based consultancies. In other words we need to be aware of “the potential ‘costs’ as well as ‘benefits’ of cooperative research” (Behrens and Gray, 2001, p. 197). Universities should also establish stronger up-front processes and protocols governing academics’ involvement in university-industry partnership – and this should include ways to better determine the
benefits to the individual, work group, or research centre. As Giamatti (1982, p. 1280 cited in Behrens and Gray, 2001) says: “The constant challenge for the university is to know in clear and principled terms how to cherish learning, and its pursuit, for its own sake; and how to assist in bringing the results of free inquiry to the rest of the society for the good of the public” (p. 197). Attending to such issues may help to resolve some of the dilemmas we faced.

Conclusion
In this paper we have reflected on two challenges we faced as early career environmental education researchers, challenges relating to our control of the research agenda and the clash between university and corporate values. Given the increasing focus on university-corporate partnerships, and corporate-funded university research, it is imperative that such challenges be addressed early on in such relationships. Our hope is that in the future we can make such relationships work - for ourselves as university-based researchers, for corporations, for the public good, and for the environment.

References


