

TERTIARY TEACHING
Doing it Differently, Doing it Better

JIM CAMERON, GREG SHAW AND ALLAN ARNOTT
EDITORS

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INTRODUCTION

ALLAN ARNOTT, JIM CAMERON AND GREG SHAW

Tertiary education in Australia in the last decade has undergone major change in response to shifts in government policy, increasing numbers of students, and dramatic developments in education-related technology. This change is reflected in, among other things, heavier teaching and administrative workloads, the commercialisation of education and training, increased competition between institutions, a shift in funding from government to consumers, limited and diminishing resources, and an increasing diversity of students. Buzz words like 'equity' and 'excellence' have flavoured the public debate, often seemingly at odds with equally strident calls for 'efficiency' and 'effectiveness'. In response, tertiary teachers have been compelled to take an increased interest in teaching and learning, often needing to do things differently as past practices no longer seem suitable or appropriate. Doing things differently does not always lead to doing things better. Yet, there are clear indications of efforts to improve teaching and learning practice. Documenting and sharing those efforts was a major purpose of the Teaching and Learning Conference held at the Northern Territory University, Darwin, in 1999 on the theme 'Tertiary teaching – doing it differently – doing it better?' This book brings together a sample of the papers presented at this conference, representative of the themes and practices that were explored.

While much of the impetus for change has come from external forces, internal influences have also had an impact. In particular, there has been a growing understanding of how adults learn. Bates (1997) has made the point that tertiary education had its origins in our agricultural and industrial past so that apprenticeship models and teacher-directed methods still dominate practice. But that situation has begun to change. In the last twenty years there has been significant research into adult learning in formal education settings. The expansion of distance education has been particularly influential in generating these research insights, as distance educators strive to better match adult learning with new methods and media. The professional training of tertiary teachers, increasingly required by the institutions in which they work, has enhanced this trend so that university and college teachers, adult educators and trainers are thinking more today about how they can facilitate learning. Whatever the cause, these trends can be positive if the

outcome is better learning through better teaching and a better appreciation of how adults learn.

The quality movement of the 1990s in universities and colleges throughout Australia was one response to pressures to do things differently and better in the tertiary sector. This movement is based in economic and managerial rationalism and its measures of quality are dominated by economic efficiency and reporting loops. Quality concerns about better teaching and learning are often marginalised, with other aspects of an organisation's operations taking prominence. There is little evidence that the quality movement has had a particularly significant effect on improving teaching and learning. Similarly, the development of vocationally oriented curriculum, alternative methodologies for delivering courses, and the assessment of learners have been dominant priorities, particularly in the TAFE and industry components of tertiary education. Again the court is still out as to the how significant their effect has been on improving teaching and learning or on facilitating better work practices.

Increases in student numbers over the last decade have brought with them issues of access and equity. Tertiary education has become popular education, and most Australian adults can expect to undertake some form of post school education and training over their lifetime. TAFE numbers continue to increase at a steady rate and industry has become a significant partner in both training and assessment. Where, previously, rigorous academic filters have applied, universities have become open institutions, and almost anyone can aspire to a tertiary education.

Providing access on this scale has resulted in growing diversity among learners and a concomitant need to provide a greater range of approaches and support. Learner needs, however, are stretching the capacity of institutions and individual teaching staff to respond. Contemporary teaching and learning are occurring in a hostile environment where, on the one hand, there is an increased need to provide individualised learning through openness and flexibility, while, on the other, there is a reduced capacity to do so. This situation is not without its consequences. A recent study (McInnis, 1999) indicates that four out of five academics in Australia feel as though they are under stress. Yet, despite this stress, there is real effort to bring about change and provide better education.

Growth in student numbers has not been matched in real dollars per student and institutions have had to find ways of covering more students with shrinking budgets and increasing expenses. Mass education has required exploration of new delivery modes. The use of various technologies and modes of delivery, which have allowed increasing

numbers of students to be taught through distance education, is commonly viewed as a major solution. Thus, communications technologies and online teaching using the Internet are increasingly being applied. This is certainly one way of increasing access, yet, paradoxically, it decreases access for some as the digital divide often corresponds with the economic divide. Also, there is no real evidence as yet that technology-based education is cheaper, or more efficient, or more effective than traditional face-to-face forms, or that the majority of tertiary teachers are confident and competent in its use.

When we were organizing this conference, we did not know what to expect. We work in a small regional university serving the educational needs of a diverse community of less than 200 000 people scattered over an area one-sixth the size of the continent. In such a situation, it is easy to be convinced that the pressures and constraints we deal with are somehow unique. We were curious to know whether other people around the country shared our concerns and hoped that, by meeting together, some of the issues canvassed above would be addressed. We were overwhelmed with the response; so much so that it has not been possible to reproduce all 55 papers presented at the conference. We have made a selection that seemed to us to be representative of the current issues in and approaches to tertiary teaching and learning and that will contribute to a continuing and increasingly informed debate. In doing so, we are conscious that others would have selected different papers for inclusion.

For convenience, we have grouped the papers around five broad themes, recognising, however, that the contents of the papers as well as the themes overlap. These themes, which we explore further below with reference to specific chapters, are: the context of tertiary teaching and learning, particularly the political/policy context; the ramifications for tertiary education of this context; the action of teaching and learning in complex and hostile environments; a recognition that the teaching environment consists of great diversity, and, finally, that technology is being explored as a way of dealing with some of these issues.

Context

Through his reflections on the poverty of the university, Jim Jose sets the scene. He describes quite powerfully many of the issues that have beset Australian universities over the last decade and provides us with a sobering view of teaching and learning in modern universities. His discussion of the 'industrialisation of instruction' will touch a raw nerve with many in the tertiary education sector. The developing 'business mentality' will, as he believes, continue to lead us down a path of continuing intellectual impoverishment. Jose provides us with a wake up

call, or at least an opportunity to pause and consider what tertiary education is all about. The economic rationalist approaches that characterised the latter half of the twentieth century have well and truly become a part of universities, not so much because universities themselves have chosen this but because the funding base demands it. The dominance of vocational outcomes and the need to have the inputs matching outputs in terms of productivity and economic growth have changed the nature of tertiary education, possibly forever as Jose points out. And, yet, despite the scientific planning that supports the Fordist approaches that have come to dominate, there is no clear evidence that in the long term there is any real economic advantage.

In similar vein, although on a micro scale, Walters' *Policy impacts and culture change* provides us with an insider's view of a university in the mid 1990s as the outcomes of government policy bite into the institutional fabric and as the institution itself convulses through a process of change as it attempts to survive. He describes vividly the impact of the manoeuvres and machinations on staff resources and staff morale as the institution sets about its restructure. His account, while based on real experiences, could well be replicated in most universities and colleges in Australia. His reflections remind us that education is actually a social phenomenon and that educators are real people, real individuals, and not just members of some large system being driven towards greater efficiency. In doing so, he raises important questions about the role of a university within its community, and reminds us that, at times, efficiency measures that may have a sound economic basis may not match community needs.

Jose and Walters locate tertiary teaching and learning within a decidedly socio-political and economic context and indicate broadly what the ramifications for teaching and learning are as a result of current policies. They make clear that it is the teacher that has had to carry the burden of these changes, though in the broader view it is the quality of learning and knowledge acquisition that suffer.

Ramifications

The ramifications of policy and funding changes are developed strongly by Pederson and Hill in their chapter *Meeting The Challenge of Massification*. Here, the authors analyse the impact that increasing numbers of students and declining resources have had on tertiary education. As they see it, tertiary education has become mass and popular education and, while this may be better than the elitist situation of the past, the process of adjustment by institutions, teachers and learners has been difficult. They suggest that the process of massification has an

optimistic side to it, and that the diversity of students now entering the system can be managed positively if major planning and other adjustments are made. Massification requires change simply because increased numbers of more diverse learners requires different approaches.

Harper and Browne further develop the ramifications of policy and funding changes during the 1990s in their chapter on bush quois. In this case, the Vocational Education and Training (VET) system is under review—particularly the systems based and assessment driven nature of it. They describe a teaching and learning dilemma where they must teach a nationally accredited course with fixed learning outcomes and assessment within a culture quite different from the one in which the course was planned. They describe a VET system under further stress as the ramifications of placing elements of the system into an indigenous context is explored. Their response is to not just accept what they are given as a curriculum but to take it and modify it through adjusting the learning methodology so that the required outcome is achieved in a culturally appropriate way. That the methodology is a pleasurable way to learn is an added bonus. We see here two practitioners in tune with their learners and their environment grappling with issues and deriving new and positive actions and ideas, although, as they warn, such ideas and actions are frequently context specific and should be treated as such. Their description gives us a sense of encouragement that learners and their needs can still dominate and that, even in highly structured environments, the professional actions of teachers are necessary and important.

As elements of competition and managing limited resources have taken hold within tertiary education, another concern that has gained prominence over the last decade is that of student attrition. The chapter by Harker, Slade and Harker, *Stemming the flow: coping with student attrition at a new university*, confronts this issue. Rapid change and substantial growth in numbers have meant that lecturing roles have changed as we become marketers and course counsellors as well as facilitators of learning. The authors explore the notion of student choice as it reflects on student attrition by way of finding some longer term solutions to limit student attrition. Such considerations these days are vital for tertiary educators. Gone are the days of captive (and select) audiences. Students have choices, there is competition, and it is a tough world out there. Survival is not just about institutions meeting their enrolment targets but is at times about individuals keeping or losing their jobs as patterns of student enrolment change. Stemming the attrition flow clearly has an educational element to it that transcends institutional or

individual survival—people will not learn if they opt out of the learning environment.

Contemporary teaching and learning in a hostile environment

For some people, doing it differently, doing it better means trying to utilise the current difficult circumstances in a more creative way. This was the case with Marchant, Pedersen and Noordink in their chapter titled *No more lectures: you are all adults now*. A major conclusion they reach is that, while there is pressure to seek innovative teaching approaches, these can encounter strong resistance from students. This is a timely reminder that the courses of action we sometimes take to improve our teaching and learning require careful thought, evaluation and adjustment, and that what we hope for may not be realised. Learning occurs not just within the political and economic constraints that are imposed from outside but is centred on the experience of the learners. Making changes without considering the learners is bound to cause problems and we need to make sure that learners know how to learn within the learning environment that we facilitate.

Along similar lines, Weal and Smith explore different learning approaches in *Teaching Microeconomics: towards a multi-modal learning approach*. They seek to engage their learners in processes that will ensure that 'deep learning', where a student interacts with and extrapolates from given information, takes place. This is in sharp contrast to surface learning where the memorising of facts may dominate. The learner-centred focus they adopt and the range of learning methodologies they employ provide a range of perspectives from which we can reflect on our own teaching-learning processes. How occupied are we with facilitating learning at a surface level rather than a deep level? As they say, however, their approach does not guarantee success; that is up to the motivation and enthusiasm of the staff involved.

Sergi, in *Using long term peer assessment to derive individual marks from group work*, explores a different dimension. Working from the premise that practitioners in his field typically work in teams and that his assessment practices should be aligned with this, he works through the development of a peer assessment system that is not only valid and reliable but is acceptable to and judged to be fair by his students.

Clark's *Towards Aboriginal environmental health pedagogy* provides another example of our quest for different and more effective teaching-learning approaches. This time an indigenous and community-based context provides the scenario for reviewing how a group of learners have been taught in the past, and how the lessons derived from that review may be used to inform improved approaches to learning and particularly

to ensure that the learning environment is culturally appropriate and sensitive and that it embodies adult learning principles.

Diversity

In *Killing off Captain Cook*, in which she outlines the major features of a pre-law program for indigenous students, Hussin highlights the importance of addressing the diversity of students in a university setting and how such settings may be seen by those students as being in some ways 'hostile'. In particular, she notes that two sets of circumstances work against the learners involved. Firstly, they have to overcome a feeling of exclusion from educational settings, often derived from experiences in primary and secondary schools. Secondly, they are confronted, through the content of their course, with the injustices of the law in respect to indigenous people. It is in the working through of these issues that the strengths of the students and their success may emerge. This, in turn, underlines the importance of all tertiary preparation programs, which have to meet the challenge of cultural diversity at the same time as they address diversity of academic backgrounds.

Marchant also picks up the challenge of student diversity and the implications this has for approaches to teaching and learning in her *Using a model of group behaviour to improve the functioning of student groups*. She reviews the dynamics and functioning of a number of student groups. Many of the students were from non-English speaking backgrounds. In the process of her study the complexity of group work became apparent. Marchant suggests that there are few simple solutions, or, as she puts it, 'magic key factors', but that there are a number of points that can be taken into account to assist us to deal with increasingly diverse student groups.

Teaching and learning online

Emerging from the 1990s, there was a growing confidence in technology as a means of providing education to geographically disparate students. The use of the Internet and online learning is now established in our educational repertoires. The chapters by Esther, Provost and O'Reilly provide us with a tri-faceted view of online teaching and learning and point to some of the lessons that can be learned from the medium and from the courses involved.

Ester's *Journalism education in an online environment* provides us with a view of the introduction of an online journalism course in a regional university, and the strategies used to build a course around use of the Internet. This raises the problems (such as veracity of information) in working with the World Wide Web. A particular feature of Esther's

observations is the importance of working partnerships between industry and the university.

Provost raises a number of issues in *Linking with the real world*. In an online hypertext program constructed by him, students used the opportunity to take control of the subject matter and thus, to a large extent, control of their own learning processes. In this way they were able to bring together to some degree the conceptual and the practical or applied elements of psychology. The ensuing student centred approach provided an effective and useful example of an online learning-teaching approach.

The final chapter, *Orchestrating distributed communities of learners via online assessment*, embodies a caution. O'Reilly suggests that there has been a rush to move into the online environment, but that there is not the commensurate research to check the effectiveness or realism of the experience for learners. She suggests that a rigorous and structured review of the emerging approaches to online assessment of students can provide us with some insights into students' learning, and issues such as staff and student workloads, access and equity considerations, and supposed openness and flexibility. Her review raises many questions about our haste to embrace online learning and provides a point of departure for further explorations of tertiary teaching and learning.

Conclusion

There is little doubt that the chapters in this book have been the result of tertiary teachers grappling with the notion of doing it differently - doing it better in an often difficult and sometimes threatening tertiary teaching and learning environment. Their efforts have not always been rewarded with overwhelming success, or even of much recognition either within or outside their institutions. But their efforts do emphasise once again, if emphasis is necessary, that teachers are sensitive to the environments in which they work and are creative and insightful in their responses to the challenges they face. This observation we consider to be the underlying theme of this volume and to the conference that gave rise to it and so express our thanks and admiration for all participants, not just those featured here.

References

- Bates, A. W. 1997, Restructuring the University for Technological Change, paper presented at the *Carnegie Foundation for the Advancement of Teaching Conference - What Kind of University?*, 18-20 June 1997, London
- McInnis, C. 1999, *The Work Roles of Academics in Australian Universities*, DETYA Higher Education Division, Canberra.