The Australian Universities' Review


Mr WRAN ... in Friedman's steps

The Green Paper Issue

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the Australian Universities' Review

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Contents

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The Australian Universities' Review (formerly *Vestes*) is published twice a year, normally in June and December.

Editorial Policy

The Australian Universities' Review is the journal of the Federation of Australian University Staff Associations. It aims to be a forum for the discussion of issues confronting Australian universities with particular reference to those matters which concern FAUSA and its member associations. These can broadly be categorised as institutional issues and staff issues.

The institutional issues are those covered by such topics as university funding and the role of funding bodies, government education policy, commonwealth/state relationships, co-ordination and rationalisation of tertiary education, education inquiries, recurrent and further education in universities, proposals for amalgamation of institutions, tuition fees, student assistance, student access and participation, research funding, state tertiary education co-ordinating bodies, university autonomy and accountability and university and departmental government. The staff issues cover such topics as academic salaries and conditions, promotion procedures, discrimination in academic employment, affirmative action, and professional development issues including outside studies programmes (study leave) and conference leave.

In each of these areas articles will be assessed on their intrinsic merit, by the use of independent referees, and the contribution which they make to the important issues of the day confronting the Federation, whether the articles in themselves support or oppose Federation policies, although the Editor will strive to achieve a balance of views in cases where an article takes an attitude directly opposed to that of the Federation. A lower priority will be given to articles which are restricted to particular disciplinary areas, which are particularly oriented to student rather than staff needs or problems, or which deal with the details of education techniques rather than with broader university problems.

Notes to Contributors

Manuscripts should normally be limited to 4000 words although longer articles will be considered. Contributors should be guided by the *Style Manual for Authors, Editors and Printers of Australian Government Publications*, 3rd edn., Australian Government Publishing Service, Canberra, 1978. Books for review should be addressed to the Editor, the policy of *The Australian Universities' Review* is to review only books dealing with universities and tertiary education generally.

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The Green Paper: Towards An Evaluation*

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The Green Paper: R or D?

I have found it helpful to distinguish, among public policy statements, between R documents and D documents. In R documents, the authorship is known and elaborate processes of consultation, sifting of evidence and marshalling of previous research will frequently have occurred. In D documents, the authorship will probably be unknown, the relationship to evidence, argument and consultation will often be more problematic, though the document may have some connection to an earlier version in a different colour. This is only a way of stating a distinction between items along that metaphorical continuum from basic research to policy implementation. Examples of Australian R statements would summon up such names as Karmel, Anderson, Keeves and Williams. In Britain, R documents are so numerous as almost to constitute an art form. They would include, to cite only recent examples, the Croham report on the UGC, the Mathias report on private, non-government sources of income, the Advisory Board for the Research Councils' *A Strategy for the Research Base*, and important studies of postgraduate education by the Economic and Social Research Council. D documents in the British context would include the Green Paper of 1985 and, more recently, the White Paper of 1987 leading to the November Baker Bill.

In this taxonomy, our Green Paper is plainly some kind of D document. It is anonymous, it is connected very closely to the chronology of political implementation and budget allocation rather than of research and analysis. It is also connected to the internal dynamics of a political party. The Green Paper bears a different relationship to matters of evidence and argument than do R documents. Indeed it has little connection to the world of R, as practised in Australia, at all. Accordingly, we may adduce systematic evidence and analysis, following the only rules most of us have, to show that arguments in such a D document are seriously flawed but we may not thereby have touched its basic intent or in any way have engaged its chief effect. If this is thoroughly familiar to people who work in public policy areas, it does need some focus here. But let me, as a further preliminary, illustrate these areas of discourse and the ways in which they differ. Here are three examples.

1. It is fundamental to D thinking and writing in Australia — I have in mind statements from DEET and ASTEC — that you get a better result in terms of targeted research productivity as you increase the size of the structure within which this activity occurs. I had always thought that this piece of public policy must rest on a very substantial body of research. But, on recent inspection, it turned out that there is only an inconclusive handful of studies of this matter — several showing that there is no special relationship between the size of a group, innovation and productivity and that productivity and size go in parallel lines of growth, with no dramatic rise occurring at a point of so-called mass. What some research shows is that you may get an improvement in productivity where age is related to size. That is, a young person with creative ideas may do better in a small group requiring no managerial competence; an older person with that managerial skill may do better in a larger structure. But none of these refinements matter in policy statements like the Green Paper which have quite other set of reasons for endorsing size.[1]

2. Recent Australian D-type discussion emphasises the importance of expanding the proportion of the relevant age groups in senior secondary school and higher education so that we may more favourably compare with the United States, Canada and Japan et al. Now if you were submitting a piece on this in an R world, the editor would insist that you note, even if only to acknowledge the complexity of altering it, the fact that compulsory schooling in the Australian states, on average, ends two years earlier than in these and other international cases. To omit this in serious analytical discussion of participation would be to leave out a major variable. The Green Paper which identifies increased participation as a fundamental goal *does not mention* the distinctive shortfall in compulsory schooling in Australia, nor does the ASTEC statement on education which appeared late in 1987.

3. My third example of the gap shows what can happen in an unmediated transition between R and D. In 1987, the Croham Report on the UGC in the UK articulated the notion of universities having a contract with the government — meaning a participation in a kind of moral bond freely acknowledged and freely entered, but carrying obligations once entrance had been made. It was an interesting idea though some argued that, in its gratuitousness, it was rather like a loyalty oath for citizens. When the British White Paper came out a few months later, this rather genial 18th century sense of contract in Lord Croham's document had become a specific mechanism of allocating funds to universities and polytechnics. Each university and each poly would enter into a contract in which the services to be provided by the institution would be specified in return for the funding the government would provide. In the UK, some protest went up from R type persons but the D type people believed, at least for a while, that they were away with an excellent idea. So contract had passed from a gratuitous moral statement to the kind of undertaking you would probably want from a used car dealer. (Interestingly enough, as I will show a little later, the used car version reappeared with great prominence in our Green Paper.)

The thrust of my paper (which is confined to universities) is to suggest that the Green Paper, and the structures created to implement it, represent an unusually sharp discontinuity between the discourse of serious, independent analysis and the discourse of policy making. It is easy to forget that only nine months ago the scenario was that the government had in front of it an extended R type report — the *Review of Efficiency and Effectiveness* — which had been prepared and researched in known and public ways and which offered detailed recommendations on virtually all aspects of higher education. Within a couple of months, with a change of minister though not of government, without *Efficiency and Effectiveness* having been properly acknowledged, without significant consultation, without a mediating structure to translate the different chronologies, the Commonwealth Tertiary Education Commission was collapsed, and the Green Paper, cobbled together in a couple of weeks, was upon us.

I shall begin with a statement of certain matters of context which *Efficiency and Effectiveness* had some sense of but which have virtually disappeared from view.

What is special to Australian universities

It is an affront to common sense to seek to restructure a system you do not understand. There is, for example, the close association between the education of undergraduates to honours standing in our universities and the conduct of basic research. In the league tables constructed by OECD, which crop up constantly in D documents, there is one table in which Australia is by some margin at the top: the degree to which basic research depends substantially on GUF (General University Funding) rather than on targeted funding in special concentrations within universities or research institutions. In short, Australia's research effort and Australia's educational effort have been inextricably connected. Some people concerned about league tables worry about this and believe that winning this particular competition is a weakness. I have to say that I regard it as one of our interesting strengths.

There is also the fact that Australian universities are very good. I have to be assertive about this in the time that I have rather than attempting an elaborate demonstration of it. What I mean is that, in a relatively short space of time, the country has produced high quality higher degree, pass and honours graduates and has seen many of them, across a wide spectrum of fields, pass with distinction into the most challenging and demanding systems outside this country. We have seen the world's quotient of basic research in a number of areas exhibit in recent years a disproportionate input from Australia. Such things don't happen overnight; they have taken the best efforts of several generations of extremely hard-working people — a heritage of which we should be aggressively proud.

All of this is an implausible, though fascinating, aspect of our common life. The goals of our universities are indeed universalistic; they are focused at the most rigorous of non-contextual and international standards (another matter which worries the D people) as in the best of our music, art and film. I am happy to echo Hugh Stretton, and through him Noel Butlin, in contrasting such success with the relatively indifferent modern record of our business and manufacturing activities.

These achievements have not happened in Australia because of that complex mix

"There is also the fact that Australian universities are very good."

of private philanthropy and public funding which in the United States drives the system through intense institutional competition. Nor do they derive from arrangements like the highly stratified, though publicly funded, system of the United Kingdom ranging from Oxbridge to the most recent of the post-red brick universities. These successes in Australia are the result of a careful implementation, in recent decades, of what economists and political theorists might call a 'public good' philosophy of higher education: viz. an acceptance of a public obligation to provide an equitable quotient of quality itself. It has been foreign to our thinking that, on some performance measure, we might allow the University of Tasmania to run down drastically in comparison to the University of Queensland. We have seen it as part of what the central government is about to deliver, a high degree of quality to a geographically scattered and immobile population. And the structures through which we have accomplished this, in the modern era, have been regulatory structures with some measure of independence and specialisation of function . These structures have served as an interface between the practitioners and the providers, allowing the practitioners to be largely liberated from the political necessities that can bear in on higher education in systems other than ours. It is no accident that some of my most distinguished colleagues do not even know what the acronyms CTEC and ASTEC etc. stand for. They have not had to.

I recognize that there are important criticisms in certain areas of the efficacy of regulatory arrangements such as I am sketching here. Whatever the force of these arguments elsewhere, they are not yet carefully specified in the area of higher education. I can also produce a list of what is wrong with our universities. My point for the moment is, as the Americans say, 'if it ain't broke, don't fix it' — that is, unless it can be shown that there has been a serious breakdown in the system, there can be no case for producing a radical discontinuity in these arrangements. And even if such a breakdown had occurred, it would be essential to exercise care in the restructuring. You would want to be careful, for example, in our context, about schemes devised to ginger up systems elsewhere, some of which at their very source have been abandoned or seriously modified. I suggest, in what follows, that the Green Paper has not exercised this care.

Goodness of fit: contract, RXT, performance indicators

I have mentioned that contract was a relatively harmless, philosophical notion in the Croham Report in the United Kingdom and that it then turned up in a crude, quasi-legalistic form in the British White Paper. Then, significantly, it was not mentioned in the Baker Bill in November, which put into place the new institutional structures for universities and polytechnics in the United Kingdom. Indeed the *Times Higher Education Supplement* wrote an obituary for contracting. In reviewing 1987 (January 1, 1988), THES remarked:

> *The most contentious option of funding universities through a series of contracts is now regarded as a hastily drafted, treasury-inspired document that would be difficult if not impossible to put into practice.*

There are two levels of difficulty: in a properly articulated contract both sides spell out what their mutual obligations are and how these will be delivered and monitored. The Green Paper offers no serious detail about what the government side of any contract might look like. There is little about what it will reward and what will count as a breach of contract on either side and how it will evaluate items advanced in negotiation. It is not good enough to say that these are matters for individual contracts. It is precisely the failure of the government to promulgate generally applicable guidelines which makes contracting in camera unacceptable. As things stand, there is only a scattered list of rather worrying things which the institutions, on their side of the contract, are supposed to advance via their profiles.

Beyond these objections are the quite crippling logistical problems of actually doing the job institution by institution on a triennial basis. These alone explain why contracting is probably now off the British agenda and should never have been on ours.

A second important part of the Green Paper — the proposition of differing functions by size of institution — is another poorly designed import. This is a version of the British RXT distinction between institutions fully funded for research across the general range of teaching activities, institutions in which a mixture of teaching and selective research might occur and institutions predominantly identified as teaching. That idea was first advanced in a British national report on research in the earth sciences. It was picked up last year and commended, as a general proposal, by the Advisory

Board for the Research Councils document *A Strategy for the Science Base* published in May of 1987. At its source, this proposal is not intended, in its distinctions between R X and T, to coincide with exact numbers although there is some notion of size as a variable in the assumption that the larger the institution the more productive and successful its research output, especially in expensive areas of hard science. But the ABRC does not even hint at ascribing numbers to its different categories — such that above a particular number you are R, below X or T.

In the UK, the proposal of RXT has been the subject of some debate between the UGC and the Advisory Board. The UGC has argued that crude, whole-institution categories like R X and T are inappropriate and that purchase on research productivity and quality may only be gained if the unit of analysis is the department. Accordingly, the UGC argues that its ranking of departments across universities is a defensible approach. Whatever the outcome of that debate, RXT is now regarded by many commentators in the United Kingdom as unlikely to be enacted partly because there is already a high degree of quality concentration in the British system.

But by the time all this had arrived here, the RXT version had been coarsened and even confused with the UGC alternative. The section on research in the Green Paper (p.67) puts without qualification the view that research funding should go to the most successful researchers regardless of institution. This is a faithful replication of the UGC model. But the section on institutional amalgamations proposes that research across the general range of fields is to be limited by institutional size — this an Australian version of the ABRC view. And our version actually attaches numbers to its RXT model — 5000 EFTSU is an institution with 'a broad teaching profile with some specialised research activity'; 8000 'for a relatively comprehensive involvement in teaching and with the resources to undertake research across a significant proportion of its profile'. These are the threshold numbers for membership of something called the 'unified national system'.

Apart from the need to reconcile the different research voices in the paper, there is a profound puzzle about these numbers. The 5000 EFTSU is supposed to flow from the use of that number by the *Review of Efficiency and Effectiveness*, to identify a minimum demand before a new institution could be justified. But there is a basic difference between that and applying such numbers to existing and successful institutions. Here I think most readily of Flinders University which for some years has had a record superior to any other state university in attracting ARGS funds across a wide range of fields (a useful surrogate for other research performance measures) — and is well below the 5000 threshold.

A third example of poor fit is in the area of performance evaluation. The Green Paper has a number of references to the necessity of performance evaluation and assessment. The Green Paper speaks of competition between institutions, and of performance indicators at the individual, the departmental and the institutional level. Nowhere in the document is there recognition of what is involved in these things and nowhere is there proper recognition of the detailed and relatively sensitive discussion of precisely this issue in the *Review of Efficiency and Effectiveness*. There is not present in this country the expertise, the statistical base and the research culture necessary properly to launch any of these measures inside several years. I urge all Australian universities to press for some independent structure for the generation of data of the kind recommended in Hudson's report in 1985 and repeated in the *Review of Efficiency and Effectiveness*. Some recognised, independent base for the generation of bibliometric and other performance indicators must be established before we unleash upon ourselves amateurish measures of the kind which have done such harm to the British higher education system since the early 1980s. I have discussed this at length elsewhere.[2]

It is hardly surprising that the authors of the Green Paper should have been forced into such derivativeness: the general body of Australian assumptions about higher education offer little support for notions of higher education as internally competitive, as linked directly into national economic imperatives and as instrumental in character.

The Green Paper as a political document

I want now to turn to the Green Paper's claim on our attention as a political document. In this case, its success is much higher. Two other exercises in this area offer instructive comparisons: first, the response of the political community in the United States to the intention of the President and his advisers to make substantial cuts in the provision for social science research in the budget of the National Science Foundation in the early 1980s; second, the effort made under the Thatcher government to disestablish the Social Science Research Council.

In the American case, the effort of the government to intervene directly in the work practices of the research community focused especially on the social sciences but the effort was sensibly deemed by other areas of science as a potential threat to them as well. This produced a striking coalition of scholarly academies, and the federal bodies that structured them, to bring pressure to bear within Congress to cause these proposed budget cuts to be reversed during the budget discussion process, particularly in the House of Representatives.

Pre-existing communications were mobilised between the scholarly community and congressional local representatives who had an intense interest in the research institutes and research universities within their bailiwick. The result was that there was a succession of debates in the American congress on the importance of fundamental research and on the necessity for research in the social sciences and in social policy. The cuts were essentially reversed, although the averting of the danger has not led to a permanently secure position for the social sciences. In the American case, it's clear that there was something of a generalised political will which gave importance and centrality to issues in the area of research and higher education.

In the British case, by contrast, the intention to close down the SSRC on the grounds that it had sponsored biased research led to the traditionally British practice of establishing a Commission of Inquiry headed by Lord Rothschild. It was clear that there was an expectation on the part of the government that Rothschild would get the 'right answer'. But Rothschild's answer was that the SSRC should be strengthened and that its funding should be the subject of positive affirmation, both by funding agencies and the government. In the British case the countervailing force which stood between the intentions of the government and the outcome was not a quasi-democratic process, as in the United States, but the residual establishment. In Britain, there is a Tory high culture which values these activities and it has had a powerful slowing down effect on the drives of the Thatcher government.[3]

In the Australian case we lack both of these countervailing possibilities. We have no popular constituency. And, of course, we do not have a residual establishment. What we have had, of course, in the AUC and CTEC is a successful quango run by some outstanding public servants. Recent events show however that quangos of this kind which lack either a popular constituency or the protective coverage of a residual establishment can disappear overnight. The CTEC, for example, has disappeared without serious discussion.

In these respects, the Green Paper, and its new structure, are inevitably political successes of a high order with which we have no serious alternative but to learn cohabitation. Let us be clear on the price which that cohabitation may exact from us. The most problematic feature of the exercise is the locating of education, including higher education, within the Ministry of Employment, Education and Training and the creation of a toothless NBEET. It may be that, at the end of the day, these are the most significant and far-reaching of the 'reforms' which the government has set in train. I believe that these structures may not be conducive either to free inquiry or to the intellectual health of this country and I regret the necessity to say that. (I don't say it because I wish to impute malign intent to this government, or to its servants. It seems to me that they have stumbled into troubling incursions into free inquiry not out of conscious authoritarian intent but through haste and inexperience.)

Despite its positive reference to academic freedom, the Green Paper seems not to grasp the import of placing government in a position where it may directly satisfy itself, through negotiated contracts, on 'fields of study' and 'areas of research', and other institutional goals. Now of course it has been fundamental to the flourishing of free inquiry and scholarship in societies like ours that governments, by deliberate self-denying ordinance, do not seek direct involvement in these matters. Governments in the United States and in the United Kingdom, and recently here, have largely abandoned the power, which certainly goes with public funding of being able to determine outcomes in these areas.

I should like to note in passing too, that it is not only dealings with the federal government that are important here; there has been insufficient attention given to the fact that there will also be a state politics in this area. Mergers may require many of the Acts presently governing or chartering universities to be redrafted. Anyone who has sat on a university council knows the strategems adopted to avoid having the Act opened up, to avoid, in other words, enthusiasts in the upper house finally getting some foolish amendment through! We may be in for a very difficult time around several of the states.

Problems not addressed

I acknowledge, finally, that I may sound like a person who believes that the university system in Australia has reached a condition of such perfection that interventions of this sort are on principle to be resisted. Well, as I have remarked elsewhere, that is an unacceptable narrowing of the range of possible debate. I have my list of items that are badly in need of attention.

There is, for example, much closer than the year 2001, an acute crisis in the provision of 'new blood' in a number of fields of inquiry. The causes of this are complicated and are not the subject of today directly though they include the starving of the system over a considerable period of time by governments of both parties. The longer-run causes relate to the expansion of higher education in this country in the 1960s and 1970s. New fields, particularly interdisciplinary fields in the sciences, and to some extent in the social sciences, were established in that period recruiting people within a very narrow age band. These will all now pass, as it were, in lock step into oblivion with no retirements in view for at least a decade and with no new positions behind them. Beyond that, there are fields like economics where the competition of employment possibilities in government and the private sector has produced a marked decline in the numbers of students going on to honours and into postgraduate study. There is now a real question to ask — where is the next generation of academic economists to come from?

I cannot go further down the list of real problems here but they include the maintenance of quality in university teaching, the sustaining of morale in the face of declining capital and recurrent income, the deterioration of plant and equipment, the necessity to reconsider much basic curricula, the need for more coherent research agendas . . . Some of these matters were considered in the *Review of Efficiency and Effectiveness*: the authors of the Green Paper have little to say about any of them.

Conclusion

There is always a gap between R discourse and D discourse, to return to my first metaphor. I hope it may now be clear, however, why the distance between major parts of the Green Paper and systematic analysis of those topics is disturbingly wide. I am realistic enough to know that the cure will not be a return to quango-type regulation resting on independence and professional expertise. Nor do I expect the abandonment between Green and White of a principal goal of the exercise — viz. the establishment of a new level of ministerial control over Australian universities. I do have some hope that ways will be found to abandon or seriously modify such features as the notion of individual contracts struck against profiles negotiated directly with the government, the silly numbers (5000, 8000 etc.), the premature launching of rough performance measures, the insubstantial character of NBEET. Such modifications have little potential as parliamentary issues — the virtual silence of the opposition throughout is quite ominous. They may commend themselves to members of the government if sufficient of my colleagues who express private dismay at the government's initiatives find effective public ways to do so. There, finally, is the great lesson — our lack of constituency, itself an unintended consequence of the arrangements we have so far enjoyed. There is no more urgent task facing universities, if they are to survive in a recognisable form, than to seek ways to overcome their isolation from the processes by which public policy in higher education seems now to be made.

*** This is an edited transcript of a paper delivered on February 20, 1988 as part of a symposium on the Green Paper sponsored by the Research School of Social Sciences and the Australian Academy of Social Sciences. The discursive style of an oral presentation has been retained and formal documentation has been kept to a minimum. I should also make clear that I do not discuss major features of the Green Paper which were the subject of other contributions to the Symposium, e.g. the economics of the Green Paper.**

Notes

1. The following is a list of studies of this matter.
   J.E. Cohen, 'Publication Rate as a function of laboratory size in three biomedical research institutions', *Scientometrics*, 3 (1981), 467-487.
   J.E. Cohen, 'Comment on Qurashi', *Scientometrics*, 6 (1984), 27-32.
   M.M. Qurashi, 'Publication Rates as a Function of the Laboratory/Group Size', *Scientometrics*, 6 (1984), 19-26.
   R. Stankiewicz, 'The size and age of Swedish academic research groups and their scientific performance', in F.M. Andrews (ed) *Scientific Productivity: The Effectiveness of Research Groups in Six Countries*, Cambridge 1979.
   R. Stankiewicz, 'The effects of leadership on the relationship between the size of research groups and their scientific performance', *R and D Management*, 9 (1979), 207-212.
   J. Wallmark, S. Eckerstein, B. Langared, H. Holmqvist, 'The increase in efficiency with size of research teams', *IEEE Transactions on Engineering Management* 20 (1973), 80-86.
2. Paul Bourke, *Quality Measures in Universities*, Canberra (CTEC), 1986.
3. I wish particularly to commend two studies, one by Paul Flather, the other by Roberta Miller on, respectively, the US and the SSRC crisis. These are in Martin Bulmer (ed) *Social Science Research and Government: Comparative Essays on Britain and the US*, Cambridge 1987.

Flexibility and future labour needs in the light of the Green Paper: a consideration of the EHW factor

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Introduction

This paper will look at the links between education, the economy and the labour market and comment on future needs of highly skilled personnel with, if appropriate, special reference to the needs for more engineers and scientists.[1]

Though I address most of these issues in this paper, I am afraid that in regard to comments on number of places in specific courses some of you may be disappointed. This is because I find little dependable criteria either in the Green Paper or the context of its debate on which to assess the need for additional investment in higher education let along for specific places. Indeed I find the Green Paper disturbing because it seeks radical and extensive changes to higher education for improved national economic performance without adequate thought as to directions to take and without thought as to how to control the partners with which this improved economic performance requires education to work.

Though I accept the notion of increasing educational investment for improved economic performance I shall argue in this paper that the Green Paper's economic rationale for increasing higher education is superficial and leaves too many issues unresolved for achieving its aims. I shall also argue that before we significantly disturbed our higher education system with the abolition of CTEC and other organisational changes we needed, and still need, to examine in more detail the types of education, household and work interfaces compatible not only with economic performance but with our cultural and social environments. The compatibility of these education, household and work interfaces with social and economic development I call in this paper the EHW factor. In determining the appropriate interfaces or EHW factor, I believe a study of the ACTU's paper *Australia Reconstructed* is a more useful beginning than the Green Paper and I feel it is unfortunate that the Government isn't giving priority of debate to the former than to the latter.[2] Until we determine the most appropriate education and industry interfaces it is impossible for us to predict confidently whether we need any more expansion of higher education, let alone expansion of higher education in specific disciplinary areas.

The Green Paper has two major labour needs thrusts: one, explicit, to increase the proportion of qualified graduates in the labour force; the other, inferred, to continue to emphasise the expansion of places in technical and professional, industrial and business fields.

The authors of the Green Paper set, for discussion purposes, an annual higher education graduate target by the year 2001 ranging between 100,000 and 145,000 with planning estimates being based on a figure of 125,000. The setting of the minimum at 100,000, which assumes compensating trends of increasing school retention rates with declining youth population, is the subject of another paper concerned with demographic trends and school retention rates. This figure keeps the number of graduates per 100,000 of total population, including higher education graduates in TAFE, at the present figure of 550. In contrast the argument for a graduate output above 100,000, along with the argument for making higher education more relevant for industry, is based upon an economic, specifically human capital, rationale and is the subject matter of this paper. Assuming the present mix of graduates between shorter term diplomates, degree programs and longer term higher degrees, the estimated effect on the labour force of raising the graduate level to 125,000 is to raise the proportion of the labour force with at least a degree or diploma from 10 per cent of the labour force in 1986 to 15 per cent by 2001.

Though in respect of the second thrust the Green Paper does not specify any particular mix of faculty places, the objective of continuing to increase the proportions of graduates in engineering and business areas at the expense of areas such as education can be inferred from, one, statements within the Green Paper concerning the importance of the mix of graduates (p.10), two, previous papers, such as the Hudson Report, to which the Green Paper has looked for much of its evidence,[3] and the CTEC 1988-1990 Triennium Report,[4] and, three, the general ethos of the Australian Government's thrust to make higher education more relevant for industry. I was informed that the Green Paper's neglect to specify the composition of the increased number of graduates results from a lack of time in the preparation of the Paper. However, I speculate that it also has something to do with problems discussed in this paper concerning the setting of specific labour force targets.

The Green Paper's economic rationale substantially derives from Chapter 3 of the *Review of Efficiency and Effectiveness in Higher Education* (Hudson Report),[5] which in turn obtains much of its argument from the EPAC paper on *Human Capital and Productivity Growth*.[6] All are following arguments human capitalist analysts made common in the 1960s. Though I personally feel that educationists need to be more aware of the economic relationship of education I argue in this paper that like the analysis of the 1960s the present rationale runs a risk, though more through the ways of its implementation by politicians than through the fault of its authors, of being taken out of the context of the cultural, social and economic institutional settings materially affecting it.

The economic rationale of the Green Paper

The basic economic rationale of the Green Paper and the Hudson Report — namely that national economic performance substantially depends upon investment in higher education — is based, with reservations, upon two areas of statistical evidence. The first is data showing an apparently higher level of investment in higher education of countries, such as USA and Canada, with higher levels of economic productivity than Australia; the other is data showing the apparently greater lahour market rewards of higher education graduates compared with other members of the workforce.

The upper limit of 145,000 higher education graduates per year by the year 2001, set by the Green Paper authors, derives from an assumed current 45 per cent lower Australian than North American output of graduates in selected disciplinary fields. Their source is Unesco Yearbook data cited in the Hudson Report (Table 1). The 45 per cent difference is reduced to 33 per cent when all graduates, including those in TAFE, are included in the estimates. Though some, such as Windschuttle[7] and Sweet,[8] may take the authors to task over these figures, I am prepared to accept for discussion purposes that the setting of the specific discussion target at a 25 per cent increase sufficiently allows for the classificatory difficulties of the data and for a possible narrowing of the difference between Australia and North America since the early 1980s when the data was collected. In any case discussions with Canberra suggest that the actual figures should not be taken too seriously; the main aim of the authors of the Green Paper in positing targets well above 100,000 is to establish the general principle that our economic future depends upon a substantial increase in the proportion of higher education graduates in the workforce. Therefore, it is upon the credibility of this principle rather than upon problems with the comparative data I wish to focus attention.

I shall only briefly mention the second area of evidence. Both the Green Paper and the Hudson Report, though the latter with strong reservations, use the higher labour market rewards of higher education graduates to argue or infer that increased investment in higher education increases the productivity of the workforce. This conclusion, however, involves a subjective judgment. Though the positive association between higher education and labour market outcomes is indisputable, the necessary assumption that differences in labour market outcome reflect differences in potential productivity is not.

Some reservations concerning the Green Paper data

As the Green Paper authors do not attempt to match occupational places to specific educational places it is not appropriate to attack them with the conventional arguments against labour force forecasting. Nevertheless reservations, some of which the Green Paper admits, exist in making use of the data which the Green Paper does provide. I identify four of these, including:

- the appropriateness (given the existence of alternative paths with or without human capital investment to increased economic productivity) of choosing any country's educational level as a target for Australian strategies;
- the age-old problem of equating need with demand;
- the different options available other than expansion of educational places for making labour market adjustments;
- and the often neglected question of whether increased economic performance, in the narrow sense in which it is used by economists, is the right criterion on which to base improved social wellbeing anyway.

1. The making of any country's educational level a target for the improvement of our own economic performance presumes, first, that educational investment is related to economic performance and, second, that the type and level of educational investment of the country chosen as our target is an ideal form of educational investment.

Even if we accept the first assumption, we should be very wary of thinking that the level and pattern of investment of the USA, used by the Green Paper authors to set the upper level of education investment, is the ideal. Some critics in USA assert that USA is not ideal, that it produces too many graduates[9] (Freeman, 1976; Rumberger, 1981; Clogg and Shockey, 1984; Smith, 1986) is discriminatory and that its quality of achievement is highly variable.[10]

". . . it is one thing to believe we need more highly qualified workers; it is another to find the demand in the labor market for their employment."

Indeed as we go in the direction of increasing higher education investment we should note the resulting evils in the American system as well as the benefits. The American labour force is in general one of the most educated in the world, but that while, for the American people as a whole, this feature may be a source of national strength (and this the authors above qualify), for some Americans — those who do not hold credentials in this very credentialed society — it can be a barrier to income and wealth. For those not able to afford access to higher education, the lengthening of academic qualifications to enter the labour market makes education a barrier, not a facility, to social mobility and to optimal utilisation of the workforce. We must be wary that a lengthening of educational entry into jobs into Australia does not exacerbate social discrimination and create barriers for the full utilisation and mobility of the workforce.

The American experience also shows that the pressure to further upgrade qualifications is not eased but is increased by the increase of numbers into higher education. There has been a great deal of upgrading amongst the professions. Law, medicine, dentistry, veterinary science studies are only entered after completion of a first degree while pressure is being applied for entry into teaching to require a master level degree.[11] In 1983 master level degrees were already possessed by 54.1 per cent of male and 43.0 per cent of female public school teachers.[12] However, one should bear in mind that many of these were acquired in part-time study after entry into teaching.

The data which the Green Paper itself uses indicate that there is certainly not a unique relationship between investment in higher education and productivity. The Japanese are far outperforming the Americans yet have a much lower investment in formal higher education (Table 1). Their rate of completion of secondary schooling, on the other hand, is extremely high. The West Germans, one of the OECD's best economic performers, have an even lower rate of graduate output than Australians. However, a high investment in trade and technician level training apparently offsets their lower level of investment in higher education. The well-known critique of labour force planning, which these cases indicate, is that there is no one ideal path to economic productivity through human capital investment.

In fact when we question the first assumption that economic growth requires educational investment, we find strategies other than education, such as organisation of work and introdnction of new technologies, for increasing economic productivity. Indeed, some of these strategies, depending upon the way they are handled, may even be opposed to increased education.

Two hundred years ago, Adam Smith, in spite of being the founding father of human capital theory, saw the 'division of labour', not education, as the prime force behind the wealth of nations.[13] Others, identifying the division of labour, organisation of work or technology as the driving force of economic growth have different views about the effect of these factors on educational requirements.

Some contemporary writers, Braverman,[14] Dickson[15] and Reinecke,[16] see technology in terms of a contest for industrial and social control which in capitalist societies inevitably leads to deskilling and polarisation of the workforce. The school which associates economic productivity with education, on the other hand, believes the sophistication and complexity

Table 1: Higher education graduates in selected fields of study (a) for selected countries

(per 100,000 of population)

Fields of study	Australia (1982)	UK (1981)	Canada (1982)	USA (1981)	Japan (b) (1981)	West Germany (1981)
Agriculture	10	5	22	15	13	7
Comm/bus. admin.	58	29	119	164	—	10
Education	114	28	94	79	57	46
Engineering/architecture	30	62	73	50	82	37
Fine arts	19	11	29	26	17	5
Humanities (c)	96	67	148	136	228	49
Law	11	10	14	17	—	12
Medical/health sciences	36	17	70	72	23	88
Science, maths/comm. science	56	51	47	60	12	16
Total	430	280	616	621	432	270

(a) The fields of study shown are those relevant to higher education in Australia. Some countries have higher education graduates in other fields. Thus the table does not necessarily reflect the total number of higher education graduates in other countries.

(b) Commercial and Business Administration and Law included in Humanities.

(c) Humanities, Social Sciences and Mass Communication.

Source: Primary — 1984 Unesco Statistical Yearbook.
Secondary — CTEC *Review of efficiency and effectiveness in higher education*, AGPS, Canberra, 1986, Table 3.13, p.104.

of new technology requires higher levels of education (see, for example, Bell,[17] Harris[18] and perhaps to a more qualified extent various members of OECD[19] and Peitchinis).[20] It argues that the upgrading occurs by an elimination on balance of routinised and lower level skilled jobs and a compositional shift of the workforce towards service and 'brainpower' type jobs.

Views of other writers range between being optimistic and pessimistic according to their degree of sensitivity to such factors as the time horizon of the technological change, the type of labour market the technology is affecting, the balance between technology's direct effect on skill requirements of workers using the technology and its wider effects on change to labour force composition, and the writer's assumption of technological determinism.

My belief, based upon field research, agrees with a significant amount of the literature (for instance, Littler and Salaman,[21] Wilkinson,[22]) challenging the notion of technological determinism. These writers may still acknowledge technology's deskilling effect, be concerned about it, sometime feel it is likely, but question whether even under capitalism it must necessarily occur. My own work suggests that the introduction of new technologies generally requires an upgrading of knowledge and skills but that it is not inevitable.[23] Hence we currently need additional education to accommodate new technologies but we also need a more universal general education to ensure that technologies we adopt are appropriate for human development.

In brief, therefore, the preceding discussion indicates that not only are their alternative paths within the concept of human capital investment to economic productivity but alternative paths lie outside it. We might assume, remembering that there is an element of doubt, that these latter paths are compatible with increased educational investment. In accepting this assumption, we have a case for increased vocational education, but the element of doubt also indicates a case for a more pervasive broader education to help ensure the community adopts technologies appropriate to human individual and social development.

2. If the best path to economic productivity follows a particular human capital scenario, we come to the second problem of converting need to effective demand. It is one thing to believe we need more highly qualified workers; it is another to find the demand in the labour market for their employment.

Planning dilemmas caused by these two concepts are illustrated by conflicting recommendations from government departments over the expansion of engineering places in higher edncation. On the basis of need the Department of Industry, Technology and Commerce (DITAC) recommended to CTEC and now to the Williams Inquiry on engineering in higher education that there be a general expansion of engineering places in higher education. However, though in assessing this request nobody really rejects the notion of need a lot of people question the existence of effective demand. Whatever their limitations, the data in Table 1 correctly depict Australia's low output of engineering and technology professional graduates and highlight a grave deficiency in Australia's ability to compete effectively in a rapidly changing technological world. The case of the almost as low stock of higher education engineering graduates in West Germany is not comparable with the Australian as the Germans have a much higher stock of skilled workers at trade and technician levels.

Yet in spite of this accepted need another advising body to CTEC, the former Occupational Analysis Branch (OAB) of the old Department of Employment and Industrial Relations recognised an effective demand for engineers only in electronics.

The two approaches differed in that OAB identified areas of unmet demand by working first from data on current labour market imbalances to data such as international comparisons, whereas DITAC tended to work in the reverse direction. In this particular case, the OAB worked more on the concept of effective demand and the DITAC on need inferred from comparative data.

3. Even if we recognise an effective demand for additional professional labour, we have more ways of adjusting to it than expanding places in higher education. Deficiencies in trade areas may be more appropriately met by adjustments within industry. The need for greater numbers in nursing might be more appropriately met by changes in career structures and other working conditions. Immigration is another possibility, one upon which Australia has long been dependent. However, in accordance with government policy, OAB aimed to shift away from dependence on immigration as a form of labour market adjustment.

Even when educational adjustment is necessary it may be more appropriate to make qualitative adjustment, for example, a deferment of specialist training to postgraduate courses, rather than quantitative adjustment. OAB recommended quantitative adjustment in the tertiary education sector only when it felt significant disequilibria would persist without it. Even then it recommended annual evaluation of the effectiveness and the need for the adjustment. Its reasons for reservation concerning quantitative adjustment included the lack of good labour market statistical data on which to decide the number of places and the interference such as adjustment has with academic freedom and student demand.

4. My fourth reservation concerns the concept of economic performance itself. We want a high economic performance to maintain and improve our social welfare but do the two always mean the same thing? I will not explore this point but

nevertheless it is a significant one. Education linked specifically to economic performance, as measured by economists, may involve important social and welfare costs.

The need for a 'total' approach

The limitations just described in the Green Paper's economic rationale for the expansion of higher education places do not form an argument against educational investment per se. They form an argument posited against the rationale for investment based upon narrow economic and very suspect comparative data.

For reasons of meeting the demands of new technology and for reasons of making sure the technologies we adopt are appropriate, I believe we need an expansion of education, but not necessarily of higher education and not necessarily in the formal education sector. I believe the argument for additional educational investment needs to be restated in a broader educational, social and economic setting, what I call a 'total' approach. We need to discuss not just the education but the total education, household and work relationship affecting human capital investment and the curricula affecting the total not just the economic quality of life.

We can benefit in our discussions from the comparisons John Dawkins and the authors of the Green Paper introduce of educational investment and economic performance in other countries. But not in the narrow sense of simply identifying economic performance with level of educational investment. Rather the real advantage lies in comparisons of the education, household and work relationships within different countries. Differences between countries in compatibility of this relationship, which I call the EHW factor, is what I believe we really need to study in regard to improving our economic and social performance.

What we can learn from the Japanese and the Germans is the strong compatibility with economic performance of the relationship between education and industry and, from the Japanese (I am not too certain of the German) the strong compatibility with economic performance of the relationship between education, the household and work.

Examples of the compatibility with economic performance of education and work in Germany include the support industry gives to a very broadly based and extensive apprenticeship system involving 44 per cent of the 15 to 19 year old age group, and the avenues of responsibility it keeps open for persons progressing in their careers from a trade base. A comparative study of staff in metal firms in France and Germany strongly argues the compatibility of industrial performance with the German practice of recruitment at trade level and progression through the firm.[24] Comparative studies of the adoption of technology in England and Germany stress how German employers in engineering avoid deskilling their works and how they provide extensive retraining of workers on new equipment.[25] An elaborate part-time vocational system in the public sector helps support this industrial training.

I am not suggesting from these examples of features of the German system that a German model of education and work, in which the stress is upon trade and technician rather than higher education, is transferable to all contexts. But my point is that increased investment in education, though considered very important in Germany, neither has to be at the higher education level nor through the formal education sector. German industry is a senior partner in the formation of German human capital.

We might well consider from observing the German experience and from traditions we share with the Germans of early school leaving and, until recently, training through industry, whether we are wise in pushing too far down the path of further higher education investment.

Examples of the compatibility with economic performance of the EHW factor in Japan focus on the transmission of values as well as knowledge. The Japanese are taught through the school system and the pressure of families to be 'workaholics', members of teams and loyal workers to their employers. The 'learning' day which includes not just time at school, but time at coaching college, in hobby classes, in music lessons and in the carrying out of homework is long, while the school year averages 240 days compared to the Australian 200. Hence the Japanese high school graduate not only is attuned to hard work but has completed by the end of high school the equivalent of nearly 2.4 years of additional schooling to the Australian graduate. The indoctrination and screening functions of the Japanese system is compatible with Japanese work and personnel management practices, but the general education content with a high level of development in mathematics and sciences is also a suitable base for the vocational education provided by the firms themselves. Like the German, Japanese industry is a massive educator, but unlike the German it takes its recruits at a later stage. Most of Japanese process workers would have completed secondary schooling.

Again I am not saying we can transfer these ideas out of the Japanese culture into the Australian, although I suspect the values of the Japanese culture are not as different from those of high aspiring Australian families as some cynics might have us believe. It seems to me that the EHW relationships of the average Japanese and the professional Australians populations are very close. Nevertheless, the main point I wish to make is that like the Japanese we should be looking for compatibility in the EHW relationship. Obviously with the different cultures in our society our task is more difficult than in the more homogeneous Japanese society. However, the maintenance of our present standard of living could depend upon our trying. In another place I discuss how we might reconcile our multicultural differences to this task.[26]

Though we should adapt our educational and industrial system according to our own cultural, economic and social background and not that of others, certain factors overseas and at home, such as technological changes and changes in the nature of work, are causing a convergence of EHW patterns. In this paper, the rapidity of change which new technologies have on occupational and industrial workstructures is one to highlight. The Feminist Movement and the increased participation of women, together with changing sexual, familial and work values, are others demanding discussion in other contexts. The growth of the information society, mass communication and international trade cause these factors to affect the EHW relationship in all countries.

In regard to new technology and occupational change we need to note the international interest in the concept of the 'flexible worker' and its relevance for education and industry. In Australia as elsewhere our international competitiveness now depends upon the development of the 'flexible' worker, a person whom as the name infers can quickly move and adapt to new, changing, and frequently unpredictable situations. The traditional compatibility between the tasks of the worker and her/his previous classification and training into process, skilled, technician and professional levels is now no longer appropriate. With the impact of new technologies, the occupational needs of industry are reverting back to the pre-factory era when the powers of conceiving ideas, diagnosing problems, designing structures, and maintaining and operating equipment all resided in small communities if not in the one individual. The new technological age, if man is to remain master of the technology and not vice versa, demands the proliferation of workers of the Benjamin Franklin mode. But we should be well aware that this proliferation depends upon the compatibility of the education, household and work relationship and not just on education.

The deficiencies of the EHW relationship in australia

The question now arises of how compatible for economic performance is the EHW relationship in Australia. In the work cited above[27] I discuss this in terms of the relationship of education with households and work rather than just its relationship with work. But it is sufficient in this paper and an economy of time simply to confine the discussion to the compatibility of the relation between education and work or, more conventionally, education and industry.

The point I want to make is that compared with Japan and West Germany there is now a low compatibility. But this was not always so. Changing industrial structures and the decline of full-time employment for youths have destroyed what was for most Australians a fairly compatible EHW relationship. Youths took from the education system what they wanted; most took a grounding in basic literacy and numeracy, those destined for professional employment an academic education through the school system and into the university. Youths who left school early, explored the labour market with a high turnover of jobs, and then found the training and progression they needed through a career structure appropriate for their experience. But the retreat of industry as a serious educational and training partner, the upgrading of educational entry into jobs and the new demands of technology caused breakdowns in our EHW strncture which are most apparent in unemployment amongst youths and dissatisfaction, expressed by youths and employers, with the inappropriateness of the curricula of the education system. The history of this development shows that the reasons for any inappropriateness of the education sector for current industrial needs do not necessarily originate from within the education sector, nor can solutions to that educational inappropriateness lie entirely or even mainly with the education sector.

At a recent conference in Melbourne I spoke on the education sector's response to industrial needs and pointed out that it was unjust to say that education is not responsive to these needs.[28] It has long been responsive and its examples of responsiveness to new technological demands could fill several pages. Furthermore the list continually grows.

Indeed the more sophisticated argument against education's responsiveness is that it is responsive but that it is not keeping pace with the rates of change required.[29] We can argue, however, by reference to the overcoming of inflexibility of transfer in the labour market and the development of the concept of the flexible worker how if education is not keeping up with the labour market requirements of technological change neither is industry, and that for either to keep up both will have to keep in step.

Australian labour's relative inflexibility to be able to move from one occupation to another is a constraint to technological change which some, such as John Dawkins, feel education, through an emphasis upon the teaching of generic (transferable skills), can help overcome.

> *'Even with the best information on likely technological and structural change, we cannot confidently predict the types and mixtures of skills that will be needed in the future. The emphasis, rather, must be on broad and transferable skills, and attitudes which equip the workforce to adapt and influence change'*
>
> *'Industry must also play its part in turning the broadly-based skills imparted through higher education to the particular requirements of the workplace'*[30]

Theoretically transferable or generic skills are skills common to job requirements within certain families of occupations. Supposedly the identification of these skills and their teaching by educational institutions makes education more relevant for modern technological needs. However, quite apart from the fact that the stress on general education and commonality of skills contradicts what some employers consider to be a more relevant education for industry, the word, tranferable, means transferable in an occupational context. Hence, ultimately the success of the educational response depends upon the breaking down of demarcation barriers within the job market. Dawkins' statement that indnstry must play a part, if anything, trivialises the role that industry must play. Employer groups and unions must be prepared to break down the occupational families in which transferable skills can operate. Art Smith, a Canadian pioneer on transferable skills, pointed out how the concept of transferable skills was a direct attack upon industrial barriers existing in the market place.[31]

Whether or not employers and unions are prepared to take this industrial action is one thing. Whether industry is also prepared to spend money is another. Indeed a greater emphasis by education on generic and transferable skills contradicts the notion of what some employers call a more relevant education. A greater emphasis by education on the provision of general and transferable skills implies industry having to pick up the cost of specific skills training. Indeed a cynical observer of the Australian situation might well wonder about the existence of a hidden agenda in respect of industry's push to make the education sector more relevant. So far industry in Australia has a poor record of spending on industrial training. Curtain et al estimate that Australian industry only spends 0.4 to 0.5 per cent of GDP on training compared with about two per cent in West Germany.[32] These figures are consistent with the impressions gained by other observers such as the 1987 ACTU mission to Europe. Is industry therefore trying to make the public sector carry the cost of the training which in other countries it finances itself?

This reluctance of Australian employers to invest in human skill translates not only into a lack of commitment to training but a lack of commitment to employing the professional worker. While Senator Button and John Dawkins are crying out loudly for education to increase its provision of engineering and technology places at higher education level the question remains of who will employ them.[38]

Time constrains much further analysis of this point but before leaving it we should note that the case for greater investment by Australian employers in training has more than one strand. Greater investment by employers in training not only improves the effectiveness of general education by helping the employer realise the potential of the education graduate but, it is reasonable to assume, it also helps employers know better what they require from the education sector and helps them, therefore, communicate their needs better.

An appropriate response to the concerns of the Green Paper

In this paper it was not appropriate to attack the Green Paper on the grounds of the limitations of labour force forecasting. The Green Paper doesn't specifically do any labour force forecasting, and what forecasting might be inferred from the context within which the Paper was written, namely the thrust towards an expansion of technological places, is too imprecise to attack on technical grounds.

Nevertheless general arguments of the Green Paper and the contextual debate about the relationship between education and the economy did need clarification and some statement of the reservations concerning them. In brief these reservations show that the Government is suggesting a major reorganisation and major expansion of higher education without any clear directions of where we might go. The general principle of increasing education to increase economic productivity is debatable but if we go along with this, and I am inclined to do so, there are many paths other than a sheer expansion of places in higher education to follow. The economic success and the different education system of West Germany and Japan show this. The problems which the USA has with credentialism, rising educational costs, variable standards and discriminatory outcomes for different population groups also show the problems of indiscriminatory pushing down the track of higher education expansion. International experience shows that there are alternative areas for educational investment, such as expansion of secondary education and/or expansion of education in industry, that need to be balanced against the expansion of higher education.

As far as I am aware the Government is not really considering the most appropriate track for us to develop, either from our own experience or from the experience of other countries. Neither does it seem to be safeguarding us against some of the costs of change, for example, the consequences in terms of the teaching of the humanities and cultural subjects of the pressure to make our educational institutions more conscious of the industrial market. On this point I have not had time to take up the matter of general education but I believe its existence and structure is important to our effecting the adoption of appropriate new technologies and work structures for our society and economy. Certain caveats are usually made in the reports but they are demoted to the status of a by-line. The Green Paper says we must be aware of the different cultural settings in borrowing from overseas and the Minister for Employment, Education and Training says industry must play a part in the provision of transferable skills. But without proper analysis and debate of these caveats they are trite and unhelpful.

The debate over the expansion of technological places, part of the Green Paper context, though not of the Green Paper itself, illustrates the importance of this education and industry co-operation — as also does the matter of transferable skills. In terms of other countries we probably have a need for more highly skilled personnel, possibly in technological areas, but the experience of different forms of the EHW relationship in different countries show that education alone cannot resolve this need. Investment in educational places for engineering is wasteful if industry does not translate need for engineers into effective demand. Similarly education's stress on transferable skills is wasteful if industry and unions do not adapt the labour market accordingly. The solution of the question of what forms vocational education should take, whether it should be more technologically based or not, whether it should be more general or not, first awaits certain resolutions and commitment in industry. The message is that an 'education-led' recovery is not likely to work. Industry and education must work together to make it work.

> **"The message is that an 'education-led' recovery is not likely to work."**

Finally, in translating these ideas into practical realities, I believe we must begin with the discussion of appropriate structures between education and work or, better still, education, the household and work (the EHW factor). Before we undo our education system and make it subject to the whims and fancies of free enterprise we need direction, preferably by public debate, of the education, household and work relationships we want to use in the pursuit of economic and social prosperity. As a beginning to this, I believe it would be preferable for the government to give priority to discussion of the content and implications of the ACTU's paper, *Australia Reconstructed*, rather than to that of the Green Paper.

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The new binarism?: staffing aspects of the Green Paper[1]

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This paper concentrates on one specific aspect of the Green Paper — the potential problems which may flow from institutional consolidations. This seems apposite in the circumstances because the CAE sector, which currently houses more than half the higher education students, is the primary focus of amalgamation proposals. You should understand that I suffer from the fervent devotion not just of a recent convert to the CAE sector but of one returning to the fold.

The first response of many CAE academics to Chapter 8 of the Green Paper was that it contained little that had not been said before and that most institutions were already moving on many of the issues identified there as requiring action.

This was seen to be true of all or some of the following: the need for an effective system of staff assessment, longer probationary periods, academic staff development programmes and units, more term appointments, more fractional and part-time appointments, early retirement schemes including those initiated by management on redundancy grounds, and increased salary flexibility to meet market forces, including easier access to consultancy income for both individuals and institutions.

The issues which might have seemed more controversial were an increased emphasis on performance monitoring in the context of dismissals procedures ("these should be established and strengthened system-wide"); the insertion of a firm salary bar within each of the university lecturer scales; the equalisation of access to "paid time to develop skills or undertake scholarly activity" (ie, the old study leave, which is currently more widely available to university staff); and especially the notion of flexible hierarchies by which academic staff holding positions above senior lecturer would hold those positions only for set periods and could revert to a tenured position at the base of the senior lecturer scale either voluntarily or because they failed to get re-selected to the senior post at the end of the time period.

There has also been widespread concern, particularly but not exclusively within universities, that the topic of academic freedom rated only seven lines. (A promise to consider legislative safeguards will seem a bit hollow in the light of the Thatcher government's problems in this area.)

From the point of view of institutions currently in the CAE sector, it is important not to be drawn into considering issues raised in Chapter 8 in isolation from those discussed in other parts of the Green Paper. It would be a major loss if the benefits to these institutions arising from the much-heralded death of the old binary system were offset or undermined by the inauguration of a new binary system even more pernicious and divisive than the old one.

There is a great deal that is good for the CAE sector in the Green Paper in general, just as there is much merit in many of the proposals specifically in Chapter 8 and identified in the paragraphs above. Where institutions have not yet been persuaded by "management" to accept some of these suggestions — on longer probation periods, staff evaluation and staff development units, a longer teaching year, for example — the Green Paper provides powerful additional arguments if management choose to press these points. It is quite persuasive to suggest to reluctant staff that some of this bitter medicine is worth swallowing to achieve the healthy glow of university status.

In other areas, those who feel bitter and twisted by years of discriminatory practices may find sweet satisfaction in seeing the universities "brought back to the field" from their previous privileged position in relation to study leave, research funding and workloads in the light of the Green Paper's general emphasis on the centrality of teaching in the mission of all tertiary institutions. As someone who has very recently moved back to the CAE sector after a decade away, I am more conscious that the pace of change in many universities has undermined many of these privileges and injected a high level of competitiveness into a previously cosy system. Nevertheless, it is clear that the Green Paper represents a significant acceleration of the rate of reduction of differences in employment conditions between CAE and university staff.

There are also changes in attitude towards the courses offered by different components within the tertiary system, which reflect upon attitudes towards the staff who teach them and the standards they achieve. Perhaps because of the often harsh treatment handed to them in the past by universities, CAE staff tend to be more relaxed about linkages with the TAFE sector and cross-crediting (since they are the ones usually knocked back by universities and not vice versa).

This means that CAEs are not horror-struck by proposals which would include TAFE activities in institutions now set to claim the university title. The Green Paper clearly legitimates such linkages

and this has also been acceptable to the Victorian state authorities in discussions with RMIT.

It is for this reason that there is wider appeal in Ian Wallace's proposition that Swinburne might form the core of a University of Technology which retained, like RMIT, a TAFE sector as an integral component in a comprehensive structure.

This new structure might not seem to be recognisably a university under the old definition of the term. But the whole point about the Green Paper is that it exercises the prerogative of governments to redefine the universe, or at least that bit of it controllable by legislative action.

The Green Paper makes a thrust towards freeing up the use of the title "university" by setting size and breadth of study criteria. It does not follow that institutional drift will automatically occur away from a commitment to TAFE or more broadly to the particular variety of vocationalism with which CAEs have traditionally been associated, just because the title now means something else.

The logic of a University of Technology in the Melbourne context is that it would seek to differentiate itself from, not imitate, the existing institutions and thus protect and increase its share of quality students.

The term university has a market value both locally and overseas and highly respectable tertiary institutions are currently disadvantaged by not having access to this title. The Green Paper provides that access. And CAE administrators naturally and predictably welcome this change, which gives some top class institutions the chance to get to compete on an even playing field.

There is also the understated but potentially important support that the Green Paper gives for a general system of accreditation. There appears some unresolved ambiguity in the suggestions in the Green Paper on accreditation:

> *"Government would expect that the existing State bodies which accredit tertiary education awards would continue to operate, although higher education institutions that are part of the new higher education system would be responsible for their own course accreditation . . . the Government is committed to a system of national registration of tertiary awards based on approved nomenclature and criteria for accreditation." (p.49)*

The apparent intention to apply a common system which places emphasis upon the autonomy of institutions rather than central authorities is welcome in the CAE sector, especially in the ACT where the CCAE has been subjected to a more rigorous system than seems to apply elsewhere. Any system based upon the processes of review currently operative in many universities and acceptable to all universities would be a welcome alternative.

". . . the topic of academic freedom rated only seven lines."

Incitement to a more "managerial" approach to institutional management also falls on receptive ears in the CAE sector. For historical reasons, both teachers' colleges and institutes of technology have laboured under (or enjoyed, according to one's viewpoint) a system of governance which placed great power in the hands of principals and directors. At a later stage, this was modified in pursuit of notions of greater staff and student participation imported from the university sector. But the thrust towards "accountable management" — meaning public rather than internal accountability — poses more problems for most universities than it does for CAE structures.

This is not to pretend that everything in the Green Paper garden is regarded as lovely. As the recently-published response of ACDP, the college equivalent of the AVCC, made clear, there are several areas of concern. One which is particularly close to home is the danger that apparently rational policies associated with the notion of tendering for courses may be overwhelmed in practice by a tendency to pork-barrel politics. The existence of a CTEC buffer might have prevented the worst excesses of the Aviation College fiasco and the several million dollar excess charge on the national taxpayers imposed on behalf of the voters of my native Launceston.

It is to be hoped that DEET officials will be able to quietly reassure all tertiary institutions that this is not the way of the future, not even for TAFE colleges.

The thrust of this paper is to suggest that some of the consequences of the Green Paper recommendations — on structure, management and research as well as staffing flexibility — may point to unintended consequences for the CAE sector and tarnish the shining promise of the end of the binary system.

The menace of the "new binarism" is threefold. The first and most obvious element is the reconstruction of a dividing line based on size of enrolments, which will serve as a surrogate for the old research/teaching dichotomy in differential funding. The second element may emerge in the consolidated institutions now coming off the State drawing boards at an accelerating rate as a predictable response to the alternative of falling below the first dividing line or the threat to generalised research funding in larger institutions. The final element is the impact of salary flexibility within all institutions, which will tend to divide staff even more explicitly than at present along commercial-economic lines.

The division of institutions according to size of enrolments will reward those in existing large or newly-consolidated institutions at the expense of the small and more differentiated. The distinction is based on the notion of economies of scale which are asserted to occur at particular sizes of enrolments, at levels which fall just above the current size of many existing institutions. (It is unclear whether this proximity is the happy accident of an independent calculation or carefully chosen on more pragmatic grounds to force the pace of change.)

There is one sense in which there is really a new "trinarism" just as there was an old trinarism which recognised the separate identity of TAFE as a poor relation to higher education. It is clear enough that economies of scale operate by decreasing marginal costs of teaching larger classes in consolidated institutions and in reduced administrative overheads from a single central administration. It is less clear how these economies of scale relate to the two magic numbers of 5000 EFTSU and 8000 EFTSU.

Whatever the reason, instituting cumulative penalties for smallness seems an unnecessary reinforcement if the iron law of the economists is already punishing small-scale operations anyway. The effect will be to punish the poor and further reward the rich.

As John O'Brien has pointed out, while

> *"this (size criterion) seems a preferable arrangement to that which bases funding on nomenclature of institutions . . . the implication of this proposal is that it may increase the 'market advantage' of a relatively small number of institutions, for the most part existing universities, relative to institutions in smaller states and territories and in regional areas. These latter institutions may be locked into semi-permanent second-class status . . . Institutions that desire to achieve the 8000 EFTSU may be forced into amalgamations which are administratively difficult and educationally inappropriate or result in amalgamated institutions which enhance the position of the larger partners at the expense of smaller institutions."*[2]

Staff in institutions already near or even above the 8000 EFTSU number may have another reason for growing even larger, unrelated to economies of scale. The Green Paper hints at a point made more explicitly by Mr Dawkins in other places, that all institutions must expect to

have a significant proportion of their staff no longer funded for conducting research, either because they do not have strength in that area or there is an oversupply of research workers on particular topics. So even large institutions face the disruption of coping with identifying such staff if they are faced with a requirement to fund, say only half or three-quarters of their current staff complement.

If these institutions can embrace a significant body of CAE staff, their problems may be solved. CAE staff can be reliably presumed to be generally less active in the more costly varieties of research, since they have never been funded for research in the past and generally it was not within the mission of these institutions to reward research, at least until recently. Incorporating a sizeable percentage of CAE staff into a new jumbo institution will provide a relatively easily identified group of non-researchers to non-fund, with the recruits grateful enough for the increase in status not to resent being used to defend the status quo.

For staff within small institutions, above that 2000 EFTS which the Green Paper acknowledges may be "reasonably cost efficient", the future will be bleak unless their management can come up with some alternative structural affinity acceptable to NBEET. The pool of income available to meet basic salary commitments is scarcely going to allow for any of the flexibility commended in Chapter 8, since the pool is guaranteed to continue shrinking each year.

If these institutions are already reasonably cost efficient, as most will be after the consistent pressures of the last few years, then widespread redundancy may be the old alternative to bankruptcy. Since bankrupting local tertiary institutions may be politically unacceptable (except perhaps in Wales) the practical effect will be the creation of artifices — Clayton's amalgamations sustained by a conspiracy of silence in which the staff are really part of the binary "underclass".

Most of the new round of proposed consolidations tend to focus upon linking CAEs and universities. None yet suggested seem to be amalgamating universities with other universities but that is presumably not excluded from the agenda for Griffith, Murdoch or even Newcastle-Armidale if they are overwhelmed with distaste for their CAE neighbours. (The "one big union" kite flown by the South Australian minister seems to have not attracted much hot air.)

Experience with earlier "Uni-coll" amalgamations points to severe problems in industrial relations and personnel practices. (It is a matter of regret that the proceedings of the 1982 DDIAE Conference and the 1987 Armidale Conference, both on the experience of amalgamations, have not yet seen the light of day.) There is a real danger that the university will be seen as the senior partner and will be able to impose on CAE staff a whole set of personnel practices, as well as self-protective and self-aggrandising claims on courses and resources.

On the basis of protecting academic standards on behalf of the whole institution, the managers of the newly-consolidated structure may well adopt the university's existing criteria for appointment, evaluation of performance of probationers, promotion and access to research funds and study leave. In this case, CAE staff appointed with different qualifications, experience and expectations will be severely disadvantaged. In some institutions which are relatively new foundations — like the CCAE for example — this may not matter much because the pool of applicants for posts did not differ much from those appointed at the same time to universities. In others, there may be large discrepancies between university and CAE staff in terms of the mix of practical experience, formal qualifications and research activity.

"This means funds for the high flyers must be diverted from those who can be bought more cheaply."

If these problems are not addressed in terms of transition arrangements, including funding for staff retraining and upgrading, many of these new consolidations will mirror internally the worst of the old binary system's discriminatory hierarchy and inevitable antagonism. One alternative to making such arrangements — the "dual pathway" solution — creates its own problems, not least the recognition that one of the basic academic rationales for larger units is lost if there is no integration of staff policies.

The third component of the "new binarism" is not directly related to institutional consolidation. It flows from the emphasis on salary flexibility and the possible lessening of controls on outside earnings. The word "possible" is appropriate because the Green Paper discussion is elliptical here, as elsewhere. In the half-page discussion, it is not made clear whether the authors of the Green Paper share the opinions of the authors of *The Review of Efficiency and Effectiveness in Higher Education* who are quoted as favouring a time rather than an earnings limit on outside earnings.[3]

The Green Paper notes but does not explicitly endorse the alternative approach which is "to have all money earned by academics through consultancies paid to the institution." (p.62) From the point of view of individual academics, there might be an enormous difference in motivation and capacity for earnings between the two alternatives, depending on how the institution regards the income thus derived.

This will be particularly significant for academics in what the Green Paper calls "market sensitive" areas. Those privileged to be gifted in and interested in these areas — computer scientists, accountants, lawyers, bio-technologists and health scientists, to cite just a few — will now be encouraged to expect two additional sources of income compared to their less fortunate academic brethren.

First, they will expect to be paid a special allowance for no extra work — broadening and legitimating the previous salary subsidy paid to some categories of staff as clinical loadings. Second, they may be encouraged to use up to one-fifth of their time on outside earnings while drawing a full time salary or concentrate on this activity for unspecified but presumably significant rewards (and tax advantages) in return for paying their consultancy earnings to the institution.

This additional income might be in addition to any financial returns from other forms of exploitation of their intellectual property, especially through companies floated in association with the institution (also commended in the Green Paper). While I accept that these sorts of structures have significant advantages in easing the administrative burdens of line managers not accustomed to operating in a commercial environment, there are significant consequential problems in blending the two organisational cultures.

As I have remarked elsewhere,

"the relationship between these structures and the existing patterns of university governance remain complex, given the need for accountability on the one hand and the opportunity to apply commercial judgements on the other. A fear which has sometimes been expressed is that the priorities about resource usage — space, equipment, teaching and research talent — usually determined on academic grounds may come into conflict with the essentially commercial cost-benefit judgements of the new entrepreneurial structures . . . This is especially true for that group of staff at the cutting edge of new technologies, whose efforts may be maximised in a commercial sense by taking them out of the teaching/research setting altogether."[4]

It is clear however that some form of incentive is needed to reward those who are active in this area and to deal with the question of equity associated with transferring their income to institution-wide purposes which indirectly benefit the inactive. Provision for access to additional sources of income may ease the potentially disastrous situation of the most lucrative (and in some cases the most economically significant) areas of tertiary study being staffed by underpaid and therefore potentially inferior academics. But it also carries the implications of significant salary differentials and styles of employment within tertiary institutions.

One category of staff will be valued more highly by the institution and — if financial rationalists — expend an important fraction of their time and efforts on outside earnings. Another category who are not intrinsically idle or even less gifted may be forced by the lack of current market enthnsiasm for their teaching and research interests to reconcile themselves to the gentility of relative poverty.

Poverty might not be too strong a term in the circumstances. The Green Paper makes it clear that no additional funding will be provided by government to provide these loadings (or to take up the slack in teaching which might be generated by diversions of effort). This means that the funds for the high flyers must be diverted from those who can be bought more cheaply. As O'Brien remarks, "squeezing the conditions of one class of academics to provide incentives for another class of academics is hardly calculated to increase solidarity or co-operative methods of work."[5]

This third form of the new binarism cannot reasonably be blamed on the authors of the Green Paper; it is inherent in the system of rewards authorised by society. The policies for coping with this system within tertiary institutions which are enunciated in the Green Paper are not new either.

But it seems important to temper enthnsiasm for more flexible staffing policies with a recognition that there is still a limited cake to be divided up, the cake is getting smaller all the time, and yet the number of student mouths to be fed is intended to increase. Add on the potential problems generated by institutional consolidation discussed earlier and it becomes clear that the managers of tertiary institutions must expect to face a lot of hungry and disgruntled staff in the future.

Lest I appear to end on a note of pessimism abont the fnture, when I in fact think it is bright with opportunity, I can give heart to those who feel threatened by the pace of change by quoting from a piece I wrote in 1982 on the occasion of a conference assessing the likely impact of the Razor Gang.[6]

I referred to Donald Schon's description of the strategy of dynamic conservatism which allowed well-entrenched institutions to resist the imposition of change. Faced with resistances, changes were unlikely to occur gradually and evenly across a system in accord with some long-term strategy, but in the form of massive shifts which produced dramatic changes in some institutions but scarcely affected others.

Using Schon to analyse the local tertiary scene, McDonnell suggested that Australian universities had successfully resisted major changes aimed at widening access and increasing flexibility in curriculum by first ignoring the threat ("selective inattention"), then "connter-attacking", then aiming successively at "containment", "isolation", "co-option" and then final agreement with the least amount of change needed to neutralise the intrusion.

(Given the benefit of foresight, I might have added that history is then rewritten to indicate that the institutions would be seen to have thought of most of the ideas themselves in the first place.)

I concluded my 1982 paper with Schon's suggestion that:

"The energy required to reach the threshold of transformation takes the form of disruption and leads to crisis and that this will be brought about, in most cases, by individuals who display irrational commitment, extraordinary energy, a combativeness which enables them to battle established interests over a long period of time, and a remarkable skill at guerilla warfare."

It is possible that Mr Dawkins would be comfortable with this description; if so, the managers of tertiary institutions may need to batten down the hatches and — at least in the CAE sector — await the outcome with a great deal of interest and not a little enthusiasm. In 1982 I suggested that the Razor Gang had sounded the death knell of the binary system; in 1988 everyone seems to have at last realised for whom the bell tolls. It would be a great pity if we find, in another six years' time, that we have buried one binary skeleton only to discover several others clanking around in the closet.

References

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The Academy and the State[1]

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One of the few virtues of the Federal Government's Green Paper is that it has created a climate for nrgent, even angry, debate about certain difficult and fundamental social questions. What kind of institution is a modern Australian university and what kind of state do modern Australians have? What should be the relations between the two? Is the modern Australian university failing in some one or more significant social and intellectual tasks that can reasonably be required of it and, if so, what should be done about it? Is the Federal Government of our country failing to realise the sort of political ethos and to respect the sort of political discretions which alone can give it genuine claims to the moral allegiance of free citizens? If so, what should be done about that?

Well, stated baldly and too generally like this, these are huge questions and unmanageable in a short paper. It may well be that in answer to the question about university failings we would, after a careful examination of all our univer-

sities, have to say that some are, and some aren't, defective in this or that significant respect. And similar complexity may apply to the very different operations of different parts of the Federal Government. Nonetheless, these are the questions that need to be addressed if the serious, as opposed to the merely tactical, challenge of the Green Paper is to be met. What I should like to do here is to make a start upon this process of discussion by addressing the questions: what kind of tasks can we reasonably expect a modern university in Australia to fulfil? What kind of relationship should there be between government and university and how is the answer to this affected by the fact that a university is government-funded?

I should state at the outset that my inquiry is unashamedly into values and that it is committed to the possibility of reasoning about values and ideals. Although logical positivism is no longer the reigning orthodoxy in philosophical circles, it has left a legacy of thinking about science and about morals which helps to make people wary of recourse to moral categories and sceptical of the powers of reason in determining and ordering values. Hence the idea that the only proper discussion in matters to do with the future of our universities can be financial or otherwise quantitative. So we hear a lot about course duplication, optimum sizes of institutions, graduation rates and so on. Much of this is offered to us in the name of realism or pragmatism. But, of course, the realist or cynics or other hard-heads are distinguished from the rest of us principally by the feebleness of their values and their lack of self-awareness rather than by some value-fastidiousness. A realist or rationalist or pragmatist is not someone who has got beyond the foolish subjectivism of ethics but rather someone who is blindly selective in his valuations, preferring some few fashionable economic or political values, such as reducing Government spending or getting re-elected, to other, somewhat more profound objectives.

Certainly, politics must be concerned with power and with practical possibilities but it is a trivial activity unless it is concerned centrally with rich conceptions of the good life. Similarly, for universities and education generally. The institutions of higher learning have or have acquired many tasks that have little to do with learning or the life of inquiry — there are car parks to be built and cleaned, buildings to be taken care of, gardens to be tended, the health of students to be looked after. Certainly there are values involved even here and there is *some* connection between such conveniences and the tasks of inquiry and learning but it would be insane to think of these tasks as more important for, or more central to, the life of a university than the tasks of inquiry and learning which they subserve. The intellectual functions of this sort of institution are both more valuable and more constitutive of it, than the tasks of convenience and (dare I say it) of administration. Perhaps no one would deny this in so many words but it is often denied in practice (when lawns are mown next to halls in which exams are proceeding and buildings torn apart with scant regard for the teaching and research which is supposed to go on within their walls) and sometimes denied by implication as in much of the Green Paper's opaque eulogies of management skills, chief executives etc. and its dim view of academic control of policy decisions.

". . . the existence of people with critical, reflective, objective habits of mind is a non-quantifiable but vital benefit or good for a community . . ."

Central tasks and central values

But it is more likely that serious debate about the tasks of a university will develop when we come to look at its research and educational tasks. Even Professor Don Aitken, who says he cannot understand what people mean when they talk about the concept of a university (*Age*, 18.11.87), presumably thinks that universities either are, or should be, places where hard thinking about difficult questions and the initiation of people into such thinking go on as central tasks. Traditionally, universities have also trained people for professional and neo-professional life and in our century this task has broadened beyond the traditional professions to include a variety of occupations.

I shall argue that there are several valuable aspects of the hard thinking just mentioned which are of central importance to the community at large but which should not be understood in crudely instrumental terms of the kind so prominent in the Federal Government's "reformist" plans for universities. These aspects are especially significant in the central Humanities disciplines such as History, English and Philosophy but are also at the heart of the theoretical sciences, such as mathematics and fundamental physics. Moreover, professional and technical education is enriched by the presence of the attitudes and processes these aspects exemplify and hence the best such education exemplifies them. What are these aspects? Well, the spirit of inquiry, the sense of involvement in a problem because of its inherent complexity whatever the payoff, the desire for comprehensive understanding, the critical attitude, which always approaches a problem with a sense of scepticism or caution about the received opinions in the field, the disinterested or objective spirit which respects data and follows the logic of the issues where they lead. This description is sketchy and incomplete but it will be readily recognisable to anyone who has ever been genuinely caught up in intellectual inquiry of any sort. I shall refer to these aspects as the reflective attitudes.

Moreover the traditional ideal of a liberal education aimed precisely to cultivate these qualities of mind and believed that certain studies, such as the examination of the past, both of one's own and other cultures, the reflective understanding of literature, philosophical inquiry, the understanding of language and society, had a central role in promoting such a cultivation. It may be debated whether this focus was too restrictive, and, in particular, too insensitive to the potentialities of scientific reflection for the liberation of the intellect, but we need not enter into that debate here. It is enough that the central Humanities disciplines fulfil this role; it is a bonus for my argument if other disciplines do it as well or even if most studies can do so (even where they commonly don't).

It is characteristic of these studies that the sort of understanding they foster is both individually and socially valuable quite apart from its economic or vocational applications. I do not mean that it has or should have no applications. A training in English can make for improved writing of reports in the public servant or for more imaginative advertising copy, just as a training in philosophy can produce better policy analysis in a politician or better handling of complex "intelligence" material in a spy. Whether these are good things or not will depend on such matters as what is being advertised and who is being spied upon for what purpose. In any case, even where such applications are unequivocally good, they do not constitute the sole justification of the disciplines in question. As Aristotle saw long ago the fact that some state or activity is intrinsically valuable is no barrier to its being also instrumentally valuable — as health may be sought for its own sake as well as for the pleasure it gives. Someone who says she is studying history or philosophy for the understanding of the past or insight into certain metaphysical, ethical or logical modes of thought has not given an unsatisfactory justification or a less satisfactory one than someone who says she is studying merely to get a job. The fact is that the former is more likely to cultivate the valuable habits of mind mentioned earlier than is the latter.

Moreover the existence of people with critical, reflective, objective habits of mind is a non-quantifiable but vital benefit or good for a community, just as is the existence of people with generous and affectionate dispositions. In both cases, of course, one can point to the important natural, beneficial consequences of such habits for the community and these are benefits which should be especially valued in a democratic community. I mean the production of more effective social, cultural and political critique, including the debunking of national myths; the presentation of new outlooks, even new visions, which get beyond mere fashion and cliche, whether home-grown or imported; and the emphasis on seeing local realities in a *perspective* which draws upon rich cultural and intellectual resources. It is such features which make the difference between a society and a civilization. A political society which acknowledges the democratic ideals of participation, freedom of speech and the value of autonomy should be particularly concerned that such outlooks exist and are widely shared.

Universities provide the natural, though not exclusive, home for these attitudes in a society like Australia and it is part of the justification for training people in the professions and other occupations within universities that they may thereby absorb some of these civilising influences. My own impression is that this happens to a greater or lesser degree in the various professional and technical faculties at my own university though it could certainly be improved. One such improvement would be a move in the direction of a common American pattern whereby students could not do a professional degree until they had had at least two years of more general tertiary education. In any event, the reflective attitudes are central to the tasks of a university and any account of how universities should respond to changed circumstances must take full cognisance of their importance.

My characterisation and defence of the values which lie at the heart of university education is not meant to suggest that all academics are dedicated to the pursuit of them. There are certainly academics who view their work in far too instrumentalist a light. In universities, as in all other institutions and associations, there are tireless careerists, burnt-out cases, bludgers, political manipulators and dimwits. No one's perfect. Nonetheless, there is a widespread practice of the reflective attitudes and widespread respect for the values of inquiry within the universities I am familiar with and I do not find this at all common elsewhere. Moreover, although there may have been an increase in the careerists and manipulators over the past 20 years (or so it seems to me) there are still rather fewer of them and they are somewhat less repulsive than is the case, for instance, in newspapers — where I worked for many years — business or the political parties. In any case the past and present existence of such vices in our universities is no reason to provide even more incentives and opportunities for them to flourish.

". . . there are tireless careerists, burnt-out cases, bludgers, political manipulators and dimwits. No one's perfect."

Green Paper blindness

If the Green Paper is any guide, this is precisely what the Federal Government's proposals for new directions in tertiary education are likely to do. To begin with, the Green Paper shows no positive understanding at all of the significance of the reflective attitudes. There are a few vague and passing references to the tasks of higher education which are not principally concerned with "pressing economic and social problems" but these are no more than perfunctory pieties. The Green Paper's conception of universities is basically one of degree factories in which raw material is rapidly processed into certified technocrats. The principal problem, as the Federal Government sees it, is merely that not enough material is being processed quickly enough, and it is all costing more than this Government is prepared to pay. In pursuit of solutions to this supposed problem the Green Paper alleges, without even an attempt at proof, that the factory is inefficiently managed because of too much participation by academics, is staffed by loafers and needs much more external supervision by government in order to meet certain vague requirements of "accountability". I shall turn to these objections shortly but it is important to note at the outset the way the critique incorporates a fundamental blindness to those central tasks which I have been highlighting. It is also worth insisting that no evidence whatever is presented for the persistent suggestion that there are serious qualitative defects in our universities. No doubt there is room for improvement but the high educational and intellectual quality of our universities is simply an internationally recognised fact, to which the Green Paper is also blind.

This blindness to what is most distinctively *educational* about universities comes out in the Green Paper's bland assertions about the issues of transfer between institutions, graduation rates and amalgamations. In keeping with the crude picture of the university it embodies, the Green Paper proposes graduation rates as a major test of university performance and simply declares that the existence of higher graduation rates in American tertiary institutions should set a yardstick for what happens in Australian universities and colleges (p.12). In spite of the admission that we currently have no reliable information on graduation rates in this country (p.17), the Green Paper proceeds blithely to the desirability of imitating the situation in the USA without any inquiry into what the high rates in the USA mean for the quality of education imparted. In fact, there has been widespread disquiet in the U.S. about the quality of higher education for over a decade and the demand for rapid certification and sustained high graduate rates is one of the causes of the disquiet. Those of us who have had anything to do with teaching and research in the USA know that there are tremendous variations in the quality of the institutions that are called colleges and universities, tremendous variations therefore in what it means to graduate from these diverse institutions and therefore in what is shown by the graduation rates, retention rates and so on. The lumping of all such institutions together as the tertiary sector and treating what is and can be done within them in the same fashion is absurd. Yet the Australian Government's determination to pressure institutions in "the tertiary sector" to yet more (and more unwieldy) amalgamations is moving towards the same absurdity.

There are serious and devoted academics in the CAEs and what I have spoken of as central tasks of a university are pursued there but usually they are pursued under severe difficulties to do with heavy teaching loads, less capable students, and very little opportunity for or encouragement of research. There are also, it must be said, staff members, sometimes in senior positions, who would not be serious candidates for even junior temporary positions in universities. In spite of all this, there may be a case for particular amalgamations, but the case pressed by the Green Paper adverts to no such particularities and sees no such problems. It is concerned merely with economic issues to do with optimal

"... we should be alarmed when governments seek to set the agenda that these institutions pursue or the priorities that are internal to the proper functioning of the enterprise."

minimum sizes and, even here, gives simplistic arguments for the idea that 5000 EFTS is the minimum allowable for a place in the new "unified national system" (p.34). It is worth remarking that some of the finest higher educational institutions in the United States making distinctive contributions to that country's intellectual life are miles below this sort of figure, for example, Swarthmore College, which is entirely devoted to the liberal arts, has an overall student enrolment of about 1200. Vasser is 2300, Oberlin and Wesleyan around 3000, while Brandeis is 3600. Admittedly, these are private institutions but they demonstrate that the Green Paper's size criteria have no educational rationale.

Transfer of credit is another issue which the authors of the Green Paper see as needing reform in order to speed the processes of graduate production. Once more, their concerns are predominantly mechanical. If student A has done six units or courses at institution X and transfers to institution Y then if she doesn't get credit for all six, time is lost and the efficiency of the conveyor belt is impaired. No matter what the six are and what they represent qualitatively, if the nomenclature is sufficiently similar, "efficiency" demands that credit be given. "When part of a credit at one institution is not given credit towards a similar course at another then resources have been wasted and students have been discouraged." (p.38)

Moreover, the Green Paper's authors have a way of dealing with the squeamishness of the academics who will have to teach the transferees — take the decisions entirely out of their hands! They complain that, "Arrangements for credit transfer usually reflect decision-making procedures made at the faculty, school or departmental level rather than at institutional level. Credit arrangements are often informal and subject to negotiation, and can vary widely within an institution. As a result inconsistencies abound. More often than not, students transferring from one higher education institution to another are given insufficient credit for their academic attainments." (p.39)

Although the Green Paper presents no evidence whatever for the value judgement in the last sentence quoted, I am prepared to accept that some existing transfer arrangements are insufficiently sympathetic or fair. What is by no means clear is that this problem is of the proportions suggested nor that its solution lies in the direction of removing the judgement of quality from the faculty or departmental level where it should principally rest. The Federal Government's desire to have executives and managers "implementing" policies (p.52) and its aversion to democratic processes (witness, the shocked tone in which the election of deans is mentioned and criticised, p.50/51) shows through here. The fact is that informal, negotiated arrangements made by, or in close consultation with, people who know about the subjects in question have to be an ingredient in determining credit. What is needed to discuss this and so many other questions posed by the Green Paper is not the production-line model and solution by fiat, in the interests of abstract uniformity, but much more concrete detail and sensitivity both to student's rights and the quality of their achievements, whatever they might be.

Other proposals in the Green Paper are bound to be seriously destructive of research and teaching in universities and especially in the Humanities. This case has been well argued by others and I will not repeat all of it now, but one major proposal will serve as an illustration. It is a primary objective of this Government to increase both the proportion of people admitted to universities and colleges and the proportion graduating from them. It is recognised that "there is no objective method of determining the level of expansion at this stage" (p.12) but this does not deter the Green Paper from offering an "illustrative" target which represents an increase of over 40 per cent in the tertiary student population by the year 2001 on the assumption that present graduation rates are maintained. The tasks of coping with this increase will receive no support from the Federal Government but universities are expected to gather the finances to handle this government-induced expansion from the private sector.

Now it may well be doubted whether the Australian business community has the necessary interest, imagination, efficiency or concern for technical innovation to come forward in substantial support of those tertiary studies which are directly oriented towards the economy. The record so far is not such as to inspire confidence. What is, however, certain is that there will be virtually no money from these quarters for the mainstream activities of the Humanities departments and what is equally certain is that this is where the biggest proportion of the increased enrolments will go. Arts faculties are immensely popular with students and will continue to be so but if the Federal Government's plan goes ahead we have a sure-fire recipe for the destruction of the conditions of teaching and research which make serious thinking and teaching in the Humanities possible. Similar considerations apply to the basic sciences and to much of the social sciences. Proposals to extend the teaching year, though too obscurely presented in the Green Paper for proper evaluation, appear to compound this problem. Of course, the influx could be reduced somewhat by dramatically increasing the current graduation rate but that poses its own threat to the quality of what goes on prior to graduation.

Understanding autonomy

I have been arguing that current Federal Government proposals represent a threat to the integrity of our universities. A certain autonomy is involved in that integrity and it too is endangered. Of course, at the very mention of autonomy, hackles will rise and the cry of accountability will go up. Universities are paid for by the Government and he who pays the piper calls the tune. Here is Professor Aitken once more:

> *"Advocates of this perspective want to suggest that universities are so special that the state has no business in them at all. But universities are not like the bedroom of the citizen. In Australia they are overwhelmingly funded from the public purse. They are not like Oxford or Cambridge Colleges, let alone like Harvard.*
>
> *"While they depend on the taxpayer for 85 per cent or so of their money they cannot be wholly autonomous, and it is footling to suggest otherwise. They have continually to renegotiate the terms of their independence." (Age 18.11.87)*

There are many things wrong with this. To begin with, of course, no one urges that university autonomy is such that there is never any legitimate role for state authorities in university affairs. Just like the nations' bedrooms, the concerns of the state may sometimes take precedence over autonomies that normally obtain. If your bedroom is the scene of marital rape or child abuse or your university alive with terrorists, outside intervention may be necessary and it may sometimes be needed in less dire circumstances. Autonomy, like all rights, is strongly presumptive but it will have limits.

Certainly the autonomy of an institution, which is a normative matter (a matter of how it ought to be able to direct its affairs) is not undermined or made "footling" by facts about its funding. The law courts are predominantly funded by the government but all of us are rightly concerned that they remain autonomous in their proper sphere of judging and administering the laws of the land. Any suggestion that instead of getting on with their difficult, time-consuming and important tasks, the judges ought "continually renegotiate the terms of their independence", should be a matter for ridicule. The autonomy of the courts is grounded in the reasoned conviction that justice is best served when those who know about the law and have the confidence of their peers are free from political and private interference in presiding over or determining questions of legal justice. Similar points can be made about the independence of juries. It is neither here nor there to talk about who pays for these vital social goods. If you are prepared to pay for a healthy court system then you pay for autonomy. This is not to say that the operations of the courts should not be subject to public scrutiny and criticism. Indeed they should and the government may need to be involved at some stage, but the crucial point is that criticism and argument, not political fiat, is what is needed.

So it is also with the Academy. The search for truth and the cultivation and transmission of the reflective attitudes, as they are embodied institutionally, need protection from government and from other interferences both because such outside bodies know too little about the concrete reality of the quest and because history shows that they are likely to have malevolent or dangerous motivations. To descend from generalities, we need only recall the attempts of the House UnAmerican Activities Committee and various state legislative committees in the United States in the 1950s to purge the universities of faculty members who were alleged to have Communist loyalties or had failed to testify in the required way. Those attempts were far more successful than they deserved to be because the universities were too craven to stand up for their autonomy. Again, it was a fair complaint against some of the activities of the student activists of the 1960s and early '70s that they constituted a threat to the autonomy of the institution, though not an external threat. Government activities can endanger the autonomy of the universities more indirectly than the McCarthy menace or the overt political directives of authoritarian regimes. As the American political scientist/philosopher Amy Gutmann has put it in her recent book *Democratic Education* (Princeton, 1987):

> *"When governmental regulations threaten to destroy the environment for scholarship and teaching, either by substantially lowering the intellectual quality of faculty or students or by drawing essential resources from academic to non-academic areas, universities dedicated to free scholarly inquiry can legitimately assert an institutional right to academic freedom, consistent with (indeed derived from) the right of their faculty to academic freedom."* p.177

From a quite different angle, the autonomy of universities has a place within a particular conception of the political order. This conception is integral to modern Western democracies where governments are seen as essentially instrumentalities of the community they represent. A state is not a supreme all-embracing whole of which the people and other institutions form mere subordinate parts. By contrast, some classical conceptions of the state give it this more dominating role often invoking metaphors and metaphysics to justify it. Certain traditional forms of conservatism, though not all, and in our own day the revolutionary totalitarianism of Left and Right have given expression and embodiment to this idea. Hegel in the 19th Century and some of his contemporary admirers are given to presenting the state as the triumphant fulfilment of all lesser associations — a kind of all-inclusive Rational Being. So Roger Scruton, an English philosopher, who is said to have the ear of Margaret Thatcher, waxes lyrical about such a state referring to it both as an organism and a person (Scruton, *The Meaning of Conservatism* p.50/51). [In fairness to Scruton it should be said that he wants to uphold some sense of autonomy for lesser institutions like universities but it is not clear that his holistic picture of the state is really consistent with this. Consistency is, however, not a striking feature of his book.] The seeds of this idea may be found in some aspects of Plato's thinking and even in Aristotle's *Politics* where he says: "Furthermore, the State has priority over the household and over any individual among us. For the whole must be prior to the part." (*Politics* Bk.I, Ch.ii.) There are different ways of taking this passage and, significantly, Aristotle later criticises Plato for having too unified a conception of the state and argues the importance of a certain autonomy for the family which Plato, you may recall, wanted to abolish (at least for the Guardians).

Modern democratic understandings of the state, drawing partly upon the liberal traditions of Locke and Mill but also other sources, see the importance of modifying the power of the government not only by internal checks and balances but by conceding as well certain rights and powers of independent decision to other groups and institutions within society. These operate under constraints, such as the law of the land, and no such autonomy is absolute (neither is the law of the land entirely), but this autonomy is part of what differentiates a modern free democracy from a totalitarian dictatorship. The churches, the courts, the trade unions, public interest groups such as consumer associations, the press and other media, the arts, the universities and the political parties all have a certain autonomy. Insofar as these groups have important and legitimate social roles and responsibilities, they act as interpreters and producers of public goods and they put a check upon the pretensions and powers of government.

None of this means that such institutions have no public responsibilities or that the community can have no legitimate concern for their proper functioning. Nor does it mean that, where public funds are spent on them, this concern may not extend to how those moneys are spent. Many of the institutions I mentioned above are privately funded, some are partly private and partly public but, however they are funded, the community is entitled to be concerned at their performance, including aspects of their financial affairs. This should be as true of private newspapers as of the ABC or the BBC. But from the existence of community responsibilities and legitimate community concerns plus the fact of public funding it does not follow that politicians should treat such institutions as mere instrumentalities of government. In particular we should be alarmed when governments seek to set the agenda that these institutions pursue or the priorities that are internal to the proper functioning of the enterprise. It is wrong for governments to dictate what decisions the Courts should come to or to bring pressure on behalf of a particular verdict. It is wrong for government to dictate what acquisitions and display policies a public art gallery pursues. It is equally wrong for governments to dictate what shall be discussed, taught and researched in universities. Yet in the case of universities there are disturbing signs that this is what is happening. I have already mentioned the likely effects on the Humanities and Sciences of the Government's clear intention to reduce public funding to the whole tertiary sector. Add to this the proposals to fund universities according to the acceptability of their "profiles" and "mission statements", against the background of obsessive interest in the universities' supposed capacity to save the economy, and we can only conclude that strong economic pressure is being exerted to diminish the university's concentration upon its central tasks. The Green Paper's approach to research, which I do not have time to discuss, can only reinforce this conclusion. If we also advert to the indecent

haste with which the whole exercise is being conducted and the Minister's repeated assertions that the supposed discussion document is "a package deal" which must be accepted or rejected and cannot be criticised in its details, then it is not surprising that there is a mood of dejection and demoralisation beginning to affect so many of us.

"But it's inevitable . . ."

One further cause of dejection, even despair, is the sense that reasoned criticism, argument, discussion and protest is futile. In the face of genuine economic problems and in the grip of largely spurious economic dogmas, the Federal Government has already decided what must be done, hence many believe that there is no point in either analysis or protest. Once the inevitability cry goes up there are plenty to urge that we should do the hatchet work for the government first so that they will reward us. We should even seek out what their secret intentions might be and implement them in advance. This is what I have heard called "the preemptive cringe" and there is, I think, rather too much of it in academic affairs generally. A quite different response, which can be just as damaging, is that which reasons, "Well it may be bad generally but it's going to come anyway so I might as well get in for my chop." I do not mean to object to the strategy of trying to salvage what one can from a disaster or to turn events to the institution's advantage but what does pain me is the sight of people refusing to fight proposals that they admit are bad, because there may be something in it for them. I should say that I do not think the Green Paper's proposals are inevitable, partly because nothing in politics is, and partly because the Government is particularly sensitive, even vulnerable, to sustained political pressure from now into the next 18 months. When Mr Dawkins spoke to the Academic Board at the University of Melbourne early in March he complacently referred to the pleasing electoral stability of the Australian people. I doubt that he is so cocky about it after March 19.

Nonetheless the Green Paper, like so much else about contemporary politics, does make one wonder a bit about the priority of rational analysis and argument over some other approaches such as political pressure and, even better, satire. So I will end with an extract from Frank Parkin's hilarious spoof of Thatcherite higher education policies in *The Mind and Body Shop*[2] Most of the book is concerned with the problems of marketing that difficult commodity, philosophy, but this extract shows the academic benefits of extending entrepreneurial attitudes even further in the more "relevant" discipline of psychology. The Vice-Chancellor (a former sales rep for Consolidated Tractor Fuels) is talking with psychologist and counsellor, Dr Hedda Hagstrom, about her latest research projects:

She ushered him into a dimly-lit room in which two chimpanzees were strapped in front of a screen showing video recordings of breakfast television. One appeared to be asleep or dead and the other was showing signs of acute emotional distress.

'It's not yet official,' Hedda Hagstrom said in a confidential voice, 'but the news is I've been awarded the OPEC contract. It's worth ninety thousand dollars.' They went through a swing door into a general office divided into glass partitions.

'Ninety grand?' The Vice-Chancellor gave a long low whistle, causing a plain typist to turn around. 'To do what?'

'They want me to show that exposing children to leaded petrol fumes increases their IQ.'

The Vice-Chancellor faltered in his stride. 'Won't that be difficult? Supposing you can't prove it?'

Hedda Hagstrom looked at him as though he had broken out into Creole or iambic pentameters. 'The grant is conditional on my proving it. These people don't throw their money away.'

The Vice-Chancellor grunted in comprehension of this basic principle. Ninety thousand dollars, he thought; surely some of it could be earmarked for the helicopter pad on the roof of the Senate House? 'Let's hope you get the result they want.'

Hedda Hagstrom held open a door for him to pass through. 'If I don't, someone else will.' She steadied him by the elbow as he stumbled on the low step. 'It's really all a question of experimental design. The answers you get are dictated by the way you ask the questions. I showed that in my project for the Scotch Whisky Cartel.'

The Vice-Chancellor's face clouded over in bafflement. 'That must have been before my time.'

'I managed to demonstrate that the growing taste for vodka was directly responsible for the increase in the communist vote. As a result, the government banned the sale of it in depressed areas.'

The Vice-Chancellor inclined his head in admiration, scratched his armpit and unconsciously smelled his fingers. 'Excellent. Well done. That's what we're here for, to give customer satisfaction. Thank goodness someone here understands the function of a modern university.'

References

1. This paper was presented at the Conference "Tertiary Education for National Economic Objectives", organised by the Melbourne University Assembly, 25-27 March, 1988.
2. Frank Parkin, *The Mind and Body Shop*, Flamingo, London, 1987.

Merits of a user-funded competitive education system[1]

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This paper considers the merits of a "user funded" competitive education system. This is not the same thing as "user pays". A user funded system could range from being completely without charges to a full-fee system, depending on what government policy was. The essential thing about a user funded system is that the funding of the institutions is decentralised unlike the present centralised system.

Let me set such a system up concretely. Let us suppose that universities charge a full-cost tuition fee of $8000. The Federal Government then offers an $8000 scholarship to all those admitted including repeat students. Each university keeps whatever funds it can raise. If it gets no students, it goes broke. If it gets a lot of students, it does well. But the students do not pay — they simply fund the institutions on the taxpapers' behalf. They are agents for the taxpayers of Australia. They are better agents for Australian taxpayers than the Government and its bureaucrats and lobby groups.

I want to establish the merits of this system by contrast with the present centralised system and particularly the even more centralised and politicised system proposed in the Green Paper. And I want to do so by drawing out the effects of the financing system (centralised/decentralised) on the management systems and the performance of the tertiary education institutions in meeting the needs of individual students and the society at large. It is true that the economic restructuring under way in Australia has created new pressures and opportunities to which the responses of the tertiary education system are critical. The present system is not designed to meet this challenge sufficiently well.

But, important as this matter is, it is not the most important consideration. The quality of our democracy is dependent on the capacities of our citizens to direct themselves towards their own goals in effective and civilized ways. A responsive and effective education system is central to this democratic goal.

In my opinion, the essential idea of democracy is the setting in place of institutions which are responsive to each citizen's free and self-expressive pursuit of their own ends within the rule of law. The more responsive our educational institutions can be made to the desires of each citizen, freely expressed, the more democratic our society will be. It may be that each of us may regard the balance of free choices made as less desirable than a balance that might be imposed by authority, of course. The incentive always exists, therefore, for people and groups with power to try to impose their own preferences on the system by making the institutions more responsive to their own perceptions of the desirable balance (and less responsive to individual citizens).

These incentives have been strong until recently in Australia and have been basic to the extension of state influence and control in many aspects of economic and social life. In this regard, the developments that have occurred within the tertiary education system should be seen as part and parcel of developments not only in the whole education system but in extensions of the role of the state more generally. Decision-making power, removed from the dispersed hands of our citizens separately, has become concentrated in far fewer hands — in the government, public service and other public authorities. The preferences of people in these powerful groups, and of other people able to influence them, come to control the performance of the affected activities. Vested interests — both economic and political — became established to protect these privileged positions. "Representative" bodies are formed to influence the centralised, politicised, decision-making process. Change becomes acrimonious and politically difficult to manage to yield necessary reforms. Reviews, policy changes, changes in advisory bodies and in key decision-makers come and go, but inadequacies in performance remain. They remain because they are embedded in the structure of centralised funding and control and the incentives associated with that structure.

The main weakness of the present tertiary education system is the extent to which it has moved down this road. Instead of responding efficiently to the directly-registered educational purposes of each citizen, it responds rather to an elite process of decision-making, filtering through an ambiguous chain of command which disguises accountability in a morass of committees. The ends served by this system, together with accountability for their achievement, are so diffuse that the system sometimes seems to verge on the irresponsible. This does not mean that people in the system do not work and study hard, but that almost anything could occur and be justified within it, subject largely to its own internal processes. This is because of the incentive structures that have developed in the system.

This situation arises for two reasons: education budgets are centrally determined by the Federal Government and its authorities, but the education institutions are ostensibly autonomous in service delivery. Institutional "autonomy" is necessary if the content of education, training and research services is to refer to an intellectual agenda broader or different from the prevailing wisdom of the government and bureaucrats of the day. Centralised funding has been provided to control overall direction, resource levels and access to these services. In particular, centralised funding has been justified in order to separate access from considerations of ability to pay. The education institutions have, therefore, been removed from accountability to a decentralised "market", on the one hand, and from direct political accountability, on the other, although some expressions of market and political pressure emerge from time to time. The two main sources of social accountability — the political process and the market— have both been dulled in their application to the system. The effect has also been to dull the incentives for responsiveness by the system to the wishes of the citizens — expressed individually through markets for educational services, or collectively through the political machinery of the state.

The problem with reform via direct political control is not that system-responsiveness could not be improved, bnt that responsiveness would be to a political process which, in practice, gives little weight to meeting effectively the highly-differentiated wishes of ordinary citizens. As I argued earlier, the centralisation of decision-making within the political process carries strong incentives for the politicisation of the entire activity through the formation and strengthening of organised interest groups. The real performance measure in such a system is effectiveness in maintaining and enhancing the power of the key players in the system. Performance in delivery of educational services to those receiving them becomes even more marginalised to the real goals of the system — the preservation of the powerful. This process is deeply demoralising to people delivering the actual services who become alienated by their inability to exercise professional independence in carrying out their functions, whose successes are expropriated by the system and its key players, but whose failures are attributed to their own inadequacies. Not surprisingly performance in real service delivery declines. Energy is diverted to "playing the system" and "keeping one's nose clean". Costs of service delivery rise and quality falls as effort is withdrawn. This has been the fate of politically centralised activities in all fields.

"Direct political control of the universities carries a real prospect of demoralising them . . ."

Nevertheless, direct political control has appeal to politicians by offering the appearance of action in the face of "a problem", and by creating further opportunities for patronage to enhance political support and influence.

In December 1987, the Minister for Employment, Education and Training released a Green Paper on Higher Education (Dawkins 1987). That paper opts unambiguously for reform by instituting direct political control. It does so by proposing the abolition of the Tertiary Education Commission, and replacing it with a system in which each institution will "negotiate" its "educational profile" with the department in Canberra, in the light of "national needs and priorities" determined by the department on the advice of a tripartite National Board of Employment, Education and Training.

The Green Paper itself acknowledges that there is no objective basis for determining what these needs and priorities are — even in terms of "the national requirement for graduates" as a whole, let alone by detailed conrse of study (pp. 2, 11, 12). It is clear that the determination of these priorities will be politically, and lobby-group, driven, therefore.

Assertions made in the Green Paper about the importance of economies of scale in institutional size (for teaching and

research) are not supported by any credible evidence, but form a key part of the proposals. Such assertions are typical of bureaucratic systems which are always unable to co-ordinate the activities of large numbers of producers (which the market achieves effortlessly). Indeed, a major recent study of this question indicates that diseconomies of scale start above a full-time enrolment of 8500 students, a "fact" not canvassed in the Green Paper.[2] Some recently amalgamated institutions have recently been decentralising their administrations because of such diseconomies.

It is important to emphasise that it is typical of such politically-controlled systems that subjective political priorities dominate decision-making and that co-ordination requires as few (and, therefore, as large) producers as possible. It is also typical that "unnecessary duplication" is seen as existing in the system (i.e. unnecessary competition), although no criteria are available to determine "necessary duplication" (i.e. necessary competition). It is also important to reiterate that such problems as what courses to provide or research to undertake, in what size institutions and with what number of rivals, are easily and automatically resolved in a decentralised market system delivering educational services to citizens who pay as they need them.

The effect of a shift to direct political control of Australia's tertiary education institutions is not likely to enhance their vigour, integrity and effectiveness as places of learning and research, therefore. On the contrary, the effects are likely to be adverse and profound. I believe Australia should not adopt the "political control" path to reform, whatever the superficial "reformist" appeal of such a course.

In particular, it is important to acknowledge that there are values of respect for scholarship, commitment to the truth, faith in reason, freedom of expression and preservation of culture which are of fundamental significance in tertiary education and research, in universities in particular. Political control places these values in jeopardy, a fact acknowledged in many countries by the creation of buffer institutions (such as CTEC) for the allocation of government funding. However well or poorly individual institutions and academics may measure up to their heritage of values flowing down history for 600 years from Bologna, Oxford and Paris, none would dispute their obligation to those values. These values form the very core of a culture to which university academics have given their loyalty for generations. Direct political control of the universities carries a real prospect of demoralising them, therefore, in a way which would not only severely diminish their capacity to perform even the utilitarian tasks which they might undertake, but which would be devastating for the preservation of their civilising, but fragile, values in the society at large.

I also wish to place on record my view that the life of the mind-at the frontier of understanding is not an orderly affair. Creativity and innovation, which every society wants for utilitarian, materialistic purposes, is not something that is produced by ordering it to appear. It arises from intuitions and empathies of a profound and subtle kind. Creativity calls for courage, and often results in disappointment, even despair. The world may not be flat! The earth may revolve around the sun! Blood may circulate in the human body! Supply may not create its own demand! Government intervention may not improve social outcomes! Such revolutionary ideas can only be conceived in a climate of tolerance for the outrageous and a willingness to seriously question any "prevailing wisdom". It is in the nature of politics, on the other hand, that patronage flows to those acceptable to the powerful and not to doubters, critics, or opponents of the prevailing wisdoms of those in power. The very climate in which creativity is nurtured is likely to be subverted by direct exposure to politico-bureaucratic control. Progress is essentially anarchic in origins and arises as a by-product of the activities of persons whose highest reward is to hear, occasionally, "the music of the spheres". Progress demands not the attempt to impose order on this process through politico-bureaucratic direction, but an enlargement of scope for grassroots intellectual anarchy, subject to the capacity of each such anarchy to muster support from the publics they directly serve.

Ralph Dahrendorf, former Director of the London School of Economics, has said that an ideal university is a "collection of anarchies". But the potential for such a structure coming about depends on the financing system and its derivative management system.

Finance and management of the education system are linked together because the real management processes (whatever their ostensible form) necessarily flow from the incentives set up by the financing system, which is the main instrument for giving effect to policy formulation. A main aspect of the present management process (which flows from the funding process) has been described by Ken McKinnon as the "gimme syndrome". Another is the diffusion of responsibility through committee decision-making. A third is a lack of entrepreneurial innovation and a resistance to change. All of these flow from the centralised funding system. The main necessity — if these

"... an ideal university is a 'collection of anarchies'."

aspects of management are to change — is to decentralise funding. By not doing this the Green Paper on Higher Education has failed to institute a genuine reform process in the system. On the contrary, it even more drastically tightens control from the centre and politicises it at the same time. The results will be very detrimental to real activity in the production of services from the system. The Green Paper is fundamentally flawed because, in out-of-date economists' style, it does not understand the nature of the production function of education services.

Planners and bureaucrats won't face the truth that the more centralised power becomes the less will be the enthusiasm and morale of the real workers producing the services and the less will be the overall productivity of the system. This is a commonplace finding of research in industrial sociology now. Command systems do not work. The Green Paper, insofar as it centralises more power in Canberra and in the central management of the institutions, will reduce, not increase, the productivity of the system. Big business has come to understand this in its own operations. Politicians and bureaucrats find this more difficult to accept because it runs contrary to the power-accumulating incentives that mould their purposes.

One would have thought that there was enough evidence around, even on a casual level, that even more centralisation of power in the tertiary education system than already exists will give even worse results than those the Green Paper proposals implicitly believe need fixing. A bigger dose of the wrong medicine, is what the so-called reforms in the Green Paper amount to. It can be predicted with unnerving certainty that the system will become less, not more, satisfactory in meeting the objectives outlined in the Green Paper, let alone other objectives which are not even mentioned.

In my opinion, there is real treachery in the Green Paper. It involves a monumental disregard for the vital myths, the fundamental values, that provide the soul of academic life: the pursuit of truth, freedom of intellectual inquiry, and so on. It is symptomatic of our times, and how far the rot has set in in Australia, that a lot of people — particularly in high places — are cynical about such idealism. And it is true that in everyday discourse, people may be more concerned about more mundane and material matters. But I believe the authors of this document would be amazed at the demoralising impact it has already had on the people on whom the system relies, out there on the periphery — people like me. The authors have told us in this document that they do not care for the very things to which we have devoted our lives. The capability of tertiary education to perform its tasks may disintegrate like the fighting capacity of any army whose morale is shattered.

CTEC was bad enough. Let us not forget that the problems of the system about to be reformed are associated with a long period of centralised funding, and the management structures that have evolved under centralised funding: a swamp of committees, deals, politics in the broadest sense. The inefficiencies in the system were driven by centralised funding and the politics of allocation and distribution. Again, as Ken McKinnon has said, this system bred a "gimme syndrome" — from top to bottom, furthermore. This is an outcome of dependency and powerlessness, not individual inadequacy. This feeling has been compounded by a decade of politicians, advised by remote bureaucrats in Canberra and a CTEC which became more and more enmeshed in political expediency, slashing away at higher education's resource base, with morale deteriorating amongst the people who have to do it. The miracle is that so many of those people have continued to do it so well, although it has been noticeable that more and more people have withdrawn from collegial interaction — a classic psychological sign of stress.

What is now proposed will make morale worse, with consequent effects on productivity. People will become more alienated. The best will leave. It will not be easy to recruit good replacements. Some good young people will be recruited — who will get some experience, and then leave. Those who stay will increasingly go through the required motions, at the minimum effort level that can be monitored as adequate without sanctions being applied. This level will be low by comparison with the present, except in activities not controlled by the unified national system. Industrial disputation will escalate. Massive increases in resources will be required to offset the productivity drop. Fees will escalate at the same time as quality falls. The big winners will be Bond University and a rapidly growing number of other private tertiary education institutions. Students will have the choice of a (privately) expensive but excellent private education or a somewhat (privately) cheaper, but poor quality (and taxpayer-expensive) State education. To contain costs, quota exclusions will get worse. This scenario is certain, in my opinion — it simply extrapolates existing trends, and it mirrors the effects of Medicare on the hospital system, and what is happening in secondary education.

Can our political masters be so stupid? The answer is yes — because in terms of the incentives the politicians and bureaucrats face, this is very clever stuff. The bad effects will all be described as "unintended".

Central planners everywhere are unwilling to give up their power in recognition of the dynamic consequences (which they call unintended consequences) of their style of action. Let me give some examples of such dynamic ("unintended") consequences to some Green Paper proposals.

Performance targets and measures

Every economist should know what these do or at least should know that for some reason Gorbachev has Gosplan in his sights. Want graduates? No worries, forget about the quality. Going to put in quality controls? What qualities are appropriate to students of different capabilities? Reckon more teaching is the answer to both? Restrictive work practices will be specified in awards — with accompanying industrial unrest. Want peer-review? As Ken McKinnon has said, you won't get much applied research done and courses will be technical and irrelevant. Paul Bourke has noted the Brits have found that this sort of idea has been a disaster — of course it has!

"In my opinion there is a real treachery in the Green Paper."

National needs and profiles

Every furphy and nostrum in the book will surface. We already know that the Minister would prefer to see Australian history rewritten (which history departments' profiles might get less favourable assessment than others, do you think?). And I notice that Asian languages and studies are suddenly in vogue — again! Some may remember the great Indonesian boom under Mr Whitlam — now reduced to a trickle of students due to lack of interest. I understand that Japaneses takes incredible effort and persistence to learn to speak and read — let along to write. How are you going to persuade students to study Japanese when they don't even want to study easy European languages? But if urgency is the name of the game, it is a waste of time training students — it is the Cabinet, the top bureaucrats, the Business Council and the ACTU that need the crash Japanese treatment, not our 17-year-olds who won't influence anything for at least 20 years. And where is the evidence, anyway, that language training is a key ingredient in export performance. People have traded for millennia with hardly anyone knowing any languages at all — not even their own.

Once the priorities are released which define "national needs", on what basis will the department ration the bids? As every consultant tendering for government work will tell you, it pays to get your nose brown. The university lobbyist chatting up the department will be a very important new appointment for every campus.

Consider also the increase in lobbying by business for "free" skilled labour supplies (through NBEET) and free applied research (through ARC). No wonder the Business Council is in favour of the new proposals since business will be heavily represented on both bodies. One has only to observe the existing lobby activity surrounding the question of skilled immigration to see the potential with respect to higher education. How will the department respond to this lobby activity? In the usual fashion outlined in public choice theory, presumably: more brown noses in the business sector and in other government departments, much to DEET's gratification no doubt.

What will the department do when demand fails to materialise to fill the places made available to meet "national needs"? What incentives will be used to influence students' choices — if any? If the plan is flexible so that resources can be switched to meet actual demand patterns as they emerge, why not just fund student demands? As Glenn Withers has said, supply does not create its own demand, either for graduates or for student places.

In fact, education as perceived by the Green Paper is simply a significant part of industry assistance. Education should, therefore, be shifted to DITAC, where it belongs, and a reference should be sent to the IAC at the earliest opportunity.

Nine years ago, Bruce Williams solved the problems of higher education by rejecting my advice. In nine years, the problems have not changed despite the application of more centralised solutions. Now the Minister and the department propose to solve the same problems, yet again, along the same track as Sir Bruce, but more so. They will fail again. I believe the sort of alternative I offered nine years ago remains the only sort of genuine solution to those problems.

That solution involves the indirect funding of the institutions by government through student scholarships (or vouchers) and loans, through contracts and grants from competing research funding bodies, and through a graduate tax to build endowment funds for the institutions. Only indirect government funding

can protect the independence of the institutions — by permitting them to earn their own way from the provision of remunerated services actually wanted by students and research funding agencies. Students are good agents for the taxpayers, since they have a strong interest in getting value. The department cannot direct students, anyway, as to what courses they must choose. It is, therefore, fatuous to say that centralised funding should remain because the department knows best what the distribution of places should be across courses. As the Green Paper admits, the department does not know any more than anyone else. In fact, there is some evidence from Britain and the United States that students act as if they were well informed on rates of return to different branches and levels of tertiary education, as well as to studying in different institutions.

The often-heard argument that students choose institutions because of their football teams, and so on, is self-serving nonsense. We already know that that is not how students behave in Australia. Their preferences for institutions and courses are carefully considered, in general, on the basis of career interests, assessment of their own capabilities, the career-enhancing reputations of the various institutions and locational factors. It is symptomatic of the power drives of those at the top of the present system that they prefer to frustrate the careful choices of our young (and their parents) by substituting their own furphies, backed by lobby-group interests.

With respect to research funding, we should not rely on a single, monolithic, ARC, but apply competitive sanctions to the research funding area, as elsewhere. If

"People will become more alienated. The best will leave."

we get to a research budget of $200 million, as Don Aitkin has proposed, we should be able to fit in at least four or five competing agencies. Otherwise, there will be no pressure on the ARC to perform. The ARC will build into yet another power centre, becoming yet another political prize — a process which will distort its function as well as creating another bureaucratic monster, in the style of all such government bodies. Led Don Aitken's ARC "A" team compete with Leonie Kramer's ARC "'B", Mike Porter's ARC "C" and Lachlan Chipman's "D" teams and may the worst performer be reduced in budget by 50 per cent, every five years, say. Such competition would give genuine incentives for the pursuit of excellence and for the warding off of political, industrial and other special interests. I note, with dismay, that no Social Science special research centre now exists, and that non-controversiality seems to be an implicit criterion in the public funding of major research centres. This seems to me to be a contradictory criterion to apply in seeking vital and energetic research.

But the most important aspect of indirect funding is the opportunity and incentive it creates for the institutions to earn their own keep and to move away from the dependency-induced "gimme syndrome". The right incentives are created for innovation and entrepreneurship in real products and services that people want, rather than those the system would like to provide. It eliminates the lobbying sleaze that goes along with centralised funding and restores power into the hands of the real service deliverers to meet their own salvation by satisfying their clients' needs by their own efforts. Such a structure is morale building, rather than morale destroying, for the real workers — the "hands on" people — in the system. The irrelevance of the vast, expensive superstructure built on their backs would become visible. Productivity would increase along with morale. The essential values of the institutions would be kept intact: to pursue truth and beauty with freedom of inquiry, without fear of retribution from those in power at the centre. Vitality and confidence would be injected into these institutions as places of learning. Australians would have a much better chance of achieving the Green Paper's objectives by going down this route, than by the route proposed in the Green Paper.

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Using our graduates is the real problem

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Debate on the economic role of education in Australia is schizophrenic. Education is seen as an underlying cause of our economic troubles — and as the key to economic salvation. Both criticisms of education and hopes for it are exaggerated in some respects and flatly wrong in others. The conventional wisdom under-rates what education is doing and over-rates what it can do.

The claims are familiar. "Australia is the world's wealthiest unskilled country," asserts Professor Don Aitkin, recently appointed to head the research council of the Government's National Board of Education, Employment and Training. "There is evidence that the current education and training system is not adequately serving national economic objectives," says Senator Button. "Australia's failure to remain internationally competitive can be traced back to the failure of our education system," claims the Dean of Business Studies at RMIT, Dr John Milton-Smith.

Equally familiar are the comparisons with other countries used to support these claims. The Business Council's Education and Training Policy uses OECD comparisons to show that school retention rates are poor and the proportion of tertiary qualified people in the workforce is low. Senator Button says that only 9.5 per cent of our workforce holds a degree compared with Japan's 39 per cent, and that our output of engineers is doubled or better by Japan, Canada, and the UK. Mr Dawkins' Green Paper on higher education kicks off in the same vein, with unflattering comparisons of school retention rates, higher education participation rates, and output of graduates in economically important areas.

The facts are more complicated. Richard Sweet, perhaps our leading analyst of education participation rates and skill levels, has persistently said so, pointing to comparisons which show us in a good light. We have more higher education students per head of population than Norway, Denmark, Switzerland, the UK and (wait for it) Japan. We have more engineering graduates per head of population than the Netherlands, Austria and Switzerland, and about the same number as France, Finland and Denmark. We lead most of the world in the production of science graduates.

Keith Windschuttle, undertaking work commissioned by the Commonwealth Department of Employment, Education and Training (DEET), provides some similarly surprising facts. Although Canada's population is half as big again as Australia's, we have nearly 20 per cent more students in tertiary education. A higher proportion of Australian adults have tertiary qualifications than Americans or Canadians. Australia has double the proportion of mathematics and science degree students of the US, and about the same proportion of students doing engineering degrees as the US and Canada. Eighty-six per cent of 16-year-olds are in education or training, just a few percentage points behind the US and Japan, which top the international league table.

How are we to square these figures with those provided by Senator Button, Mr Dawkins or Professor Aitkin? In part by noting mistakes (Senator Button's engineering statistics are simply wrong, for example), in part by noting that different sets of figures emphasise different aspects of education systems. But the main problem is the selection of statistics to highlight relative weaknesses and conceal relative strengths. Comparisons have been made to push the line that education is the source of and/or the solution to our economic woes.

Professor Aitkin believes that "it cannot be denied that without a well-educated population the US could not maintain its innovation in industry and thus its continued economic performance". The Australian Science and Technology Council (ASTEC) advises the Prime Minister in a recent report that "in order to maintain or improve competitiveness . . . even many of the newly industrialising countries are seeking to match the educational achievements of the US and Japan."

But there is no clear casual relationship between the size and character of education systems and the health of economies. The US does, indeed have a very large education system but its economic performance has been even worse than our own, with even lower productivity growth and higher unemployment. Japan's technological edge and imaginative management are often thought to go hand in hand with the Japanese education system. Yet Japanese education trails the world in the use of computers and is dominated by narrow curricula, mechanical teaching, and rote learning.

Another fashionable argument about education and the economy also runs into empirical trouble. It is widely believed that international competition and new technologies will demand rapid increases in job skills. "The workplace no longer has a pyramid-shaped demand for skills, with the bulk of jobs requiring people with only a low level of skills," says ASTEC. "Multi-skilled employees are being required in more and more jobs."

Minister for Science Barry Jones predicts that "very few jobs for which people are now being trained will be in existence in recognisably similar form by the year 2000."

South Australia's Director of Technology, Dr Peter Ellyard, believes that "jobs are being changed and created with a frightening rapidity. We need a totally new set of abilities and skills."

The evidence available suggests clearly that these claims are wrong. Studies by economists Henry Levin and Russell Rumberger show that on present trends job growth in the US will be in the low-skill retail and service sectors, that technological change creates few high-skill jobs and destroys others, and that in 10 years "the average skill requirements of jobs . . . could well be lower than they are today."

Richard Sweet has reached almost identical conclusions about Australian trends. "At both ends of the skills spectrum demand is rising for reasons that have little to do with technology . . . a shift in the balance between 'white collar' and 'blue collar' employment cannot be equated with a shift toward higher skills demands; in many occupations at the middle level, both reduced demand and de-skilling appear to be the general effect of technology."

Of course these calculations are, as all three authors point out, projections, not predictions. It is not a matter of whether skills requirements will rise but whether they will be made to rise.

An associate of Levin and Rumberger complemented their study of trends with a study of possibilities. Analysing 22 affiliated companies of the giant AT&T, Tsang found wide variations in the ability of firms to use educated and trained labour, and corresponding differences in both productivity and profitability. Tsang calculated the under-utilisation of education was associated with a loss of more than 8 per cent in output, or almost $5 billion in a $57 billion industry.

In short, firms and economies which know how to exploit educated and trained labour do themselves and their employees a favour. What is the performance of the Australian economy and companies? Very poor, the evidence suggests. In general Australian employers fail to hire educated labour and fail to exploit and develop the educated labour they do hire.

This runs counter to current beliefs, with headlines dominated by talk of skills shortages and their dire consequences for firms and the economy. But DEET's comprehensive survey found shortages in only 15 of 200 skilled occupations surveyed (which, in turn, constitute only 25 per cent of the workforce).

Furthermore, some shortages are in areas of no direct economic importance, while others are caused not by failures in the education and training system but by wastage (strongly associated with poor wages and job design) or by employers' failure to anticipate needs, especially in apprenticed areas.

Current talk of skills shortages fails to realise that over a very long period the supply of labour from the education and training system has grown much more quickly than the workforce. Over the period 1964-1984 the number of new graduates at bachelor level and above, multiplied no less than seven times compared with only a threefold increase in the labour force. Between 1968-69 and 1981-82 the number of males in the workforce with formal qualifications doubled, and the number of qualified females tripled. Over the same period the proportion of the workforce holding post-school qualifications rose from 25 per cent to 49 per cent.

That demand has failed to match supply is shown in declining returns to educated labour. Graduate salaries as a proportion of the average wage have been falling steadily for at least 15 years, a trend which continued in 1987. Behind this decline is a lack of interest in graduates by the private sector.

In a powerful paper on the use of human resources in Australian business, Professor Jane Marceau of the ANU notes that only 20 per cent of all graduates are employed in industry and commerce

combined, the rest going to the professions, the public sector, or overseas. Marcean notes that industry's performance is especially poor. When graduate engineers are excluded only 6% of graduates choose a career in industry.

Why is demand so low? Most obviously, because Australian employers, and especially private sector employers, have not understood either the value of educated and trained labour or how to exploit its potential. Marceau notes one recent survey which found that only 40 per cent of all manufacturing firms have a training budget, and the average spent per worker per year is a derisory $97.

The private sector also has a poor record of investment in kinds of economic activity likely to use educated labour. In R&D, for example, the Australian public sector investment in R&D is about three times that of Switzerland, and roughly equal to Sweden or the Netherlands. But private sector spending on R&D is very low, with Australian companies offering less than half the investment of Swiss companies, about one-third of the Swedes and the Dutch, and one-fifth that of Canadians.

What does all this suggest? First, the recycling of invidious comparisons of Australia's education performance with that of the US, Canada, Japan, Germany, and others is misleading and counterproductive. It betrays a cultural cringe which assumes that in education as in all else we are doing worse than everyone, and that the answers will be found somewhere else. It is time that the Australian debate focused on Australian realities, including the strengths and achievements of the education and training system.

And it is time the debate stopped using statistics as a substitute for thought. It doesn't matter whether we have more or fewer engineers or students or graduates than South Korea or the UK or East Germany. The questions that do matter are these: what can this particular and peculiar education system and economy do for each other? Under what circumstances?

Of course answers to those questions will cause the public education training system some discomfort. By and large, though, its faults will be found in the distribution of its effort and in its relationship with economic activity rather than (as is constantly claimed at the moment) in its size.

But most discomfort will be experienced on the other side of the education-economy nexus. The available evidence strongly suggests that the demand side is the main problem in the education-economy relationship. It is hard to avoid the conclusion that employers, who have been leading the charge on education, have been engaging in scapegoating and smoke-screening. The education and training system which is failing is their own.

There are some signs that employers are changing tack. The most productive and thoughtful employer-contributor to the debate, the BCA, is now taking a more balanced line. The Government, too, seems to be shifting the weight of its rhetoric and policy.

The ACTU and the metal trades industry have provided theoretical and practical models respectively of the way we should think about the conditions under which education and training can deliver the goods, conditions which include appropriate kinds and levels of investment, organisation and management of firms, and industrial organisation, awards, and relations.

If these promising exceptions are to become the rule, the debate will have to change. When Barry Jones first started talking up the economic role of education he was a lone voice. Now, the problem is almost the reverse. Too many people are persuaded that education is both the big problem and the big hope. It is neither. Our big problem is not in producing educated and trained labour, but in learning to use it.

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A graduate tax to finance higher education?

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In an address to the Western Australian Chapter of the Australian College of Education in April 1972, which examined the whole range of alternative methods of financing educational activities, I raised in the following terms the possibility of imposing a graduate tax as an alternative to student loans:

> *"This could require a surcharge of, say, 2½ per cent to be added to a taxpayer's income tax liability, during a specified period of his working life, for each year of tertiary education during which financial assistance (in the form of a scholarship and a living allowance) was received from the Commonwealth. In order to by-pass the early years after graduation, when graduates are likely to be faced with the problem of establishing themselves in their professions as well as that of setting up their households and providing for young families, the period during which surcharges are payable could be, say, the sixth to tenth years after graduation, inclusive. If it were considered desirable, actual rates and periods could be worked out actuarially to make the scheme financially self-supporting, but of course varying degrees of subsidization are also possible."*[1]

The suggestion for a tax surcharge was made as a possible method of responding in part to what I called the egalitarian dilemma, whereby each method of providing finance to tertiary students to cover living allowances and fees, ranging from no financing at all through various subsidy and loan schemes to full and unrecouped government funding, results in a conflict between equality of educational opportunity on the one hand and equity as between taxpayers and the students who benefit directly from the education services on the other.

This conflict arises, I suggested, because any obligation to pay fees or incur loans is likely to discourage students from low-income families from undertaking courses of higher education, while the absence of any financial obligation has the effect of requiring taxpayers to support students who upon graduation will tend to take their place among the richest members of society. It is no defence in equity, I suggested, 'to argue that students receiving the benefits, to the extent that they increase their earnings in later years as a result of their privileged educational opportunities, must pay higher taxes on those earnings; other taxpayers are subject to the same rates of tax on equivalent earnings without having had the benefit of the educational allowances'.

It was for this reason that I supported both the retention of fees for higher education and the extended use of student loans, along with increased assistance for poorer students who, whether or not fees are payable, cannot afford the much more burdensome costs of higher education that are represented by the earnings they must forgo in order to complete degrees.

Whatever the case for a graduate tax in 1972, developments since that time have weakened the case by:

- reducing the net benefits which most graduates might expect to obtain from their higher education, in terms of the present value of increased earnings after graduation after allowing for the direct costs incurred and the earnings forgone in order to complete degrees;
- reducing the net social costs which the processes of higher education impose on the community, in terms of direct outlays by the Government through grants to universities and colleges and allowances to students, after allowing for cost savings through lower unemployment benefits and the contributions which graduates make to an expanded national product;
- lessening the significance of the egalitarian dilemma by worsening the distributional position of graduates relative to other groups in the community, in terms of both horizontal and vertical equity; and
- creating a new conflict in policy objectives as a result of the Government's stated intention to achieve a large increase in enrolments in higher education on the one hand while holding down its budgetary allocations on grants and allowances on the other.

These developments have been associated with great changes in the conditions affecting the Australian economy, universities and colleges, and students and graduates. These include the following:

- There has been a severe weakening of the Australian economy as a result of unfavourable terms of trade and at the same time a significant deregulation and opening up of the economy to market forces, with adverse consequences for the level of unemployment, the rate of inflation, interest rates, real wages, business stability, public sector deficits, the balance of payments, overseas debt and the value of the Australian dollar.
- Increased payments for unemployment benefits and social welfare and largely unsuccessful attempts to reduce the level of taxes and charges have placed pressures on government budgets, leading to effective reductions in expenditures on higher education and a general ideological shift towards privatisation and the extended use of the market in financing educational and other services. Between 1975 and 1987 Commonwealth grants for higher education fell from 1.36 of Gross Domestic Product to an estimated 1.00 per cent, while grants per student fell by 22.5 per cent in 1987 prices over the same period.[2]
- The abolition of student fees and the introduction of full Commonwealth funding of higher education in 1974, along with the introduction of new forms of student allowances for a smaller proportion of students than had been receiving Commonwealth scholarships and teaching scholarships under the system previously in operation, have had the effect of imposing severe financial constraints on universities and colleges and of reducing access for low-income students. Recently there has been a partial reintroduction of fees through an administration charge and fees for overseas students and some graduate courses. Only in the last two years has a start been made in raising the level of student assistance above the level of unemployment benefits. To the extent that students are able to meet means tests for financial assistance by establishing that they are independent of their families, however, it has become more difficult to restrict support to those students who genuinely come from low-income families and would otherwise be unable to participate in higher education.
- The number of students participating in higher education has increased by more than 50 per cent since the early 1970s, the increase in the number of graduates being somewhat smaller. Although employment growth has been greater for graduates than for students with lesser educational attainments, and levels of unemployment lower, many graduates have nevertheless had to face periods of unemployment and others have had to accept lower-paid jobs which previously would have been performed by non-graduates.

"... a graduate tax would be arbitrary and inequitable in its distributive effects ..."

- Except for a few growth areas centred especially on information processing, financial markets and high technology, financial rewards to graduates have remained modest and often do not adequately reflect their investment in time, effort and earnings forgone during the period of their studies. Most graduates, especially those who move into salaried jobs and the professions, have always tended to be discriminated against in Australia, partly as a result of long entrenched methods of income determination which have traditionally placed a low value on intellectual skills and partly as a result of a highly discriminatory income tax system.
- Unlike investment in physical capital, investment in human capital has not been subject to amortisation for tax purposes so as to recognise the costs (including earnings forgone) which graduates have had to incur in order to derive incomes subject to high marginal rates of tax. During the last 20 years, also, graduates have been among those most adversely affected by the dramatic increases which have occurred in average and marginal rates of taxation as a result of the interaction of inflation and a highly progressive rate structure. But the most inequitable development in taxation during this period has been the massive growth in tax avoidance and evasion by groups in which graduates tend to be poorly represented — especially companies, wealthy persons who derive their incomes from sources other than wages and salaries, and tradesmen. As a result effective rates of income tax already tend to be higher for graduates than for many other taxpayers with comparable incomes, and a graduate tax would accentuate existing horizontal and vertical inequities in the tax system.

Whatever the case for student fees and loans under the proposed new system of higher education — and the case must depend on whether satisfactory arrangements can be made to provide greater access and adequate support for low-income students and other disadvantaged

". . . Australia is less qualified than almost any other economically advanced country to adopt a *laissez-faire* approach to its economic problems."

groups — the conclusion must be that a graduate tax would be arbitrary and inequitable in its distribntional effects, both as between graduates and other taxpayers and among graduates themselves; and that it would be counterproductive in terms of the Commonwealth Government's declared aim of substantially increasing the output of graduates. An overtly discriminatory tax on educational attainment would provide the worst possible signal to young people deciding on whether or not to embark on tertiary studies.

A graduate tax would in any case be very difficult to administer without creating further opportunities for tax avoidance, distributional inequities and unproductive outcomes, for example as a result of students not completing their degrees or of highly skilled graduates migrating to other countries.

Finally, the case for a graduate tax has been closely linked with the assertion — which most people in government and business have come to regard as a self-evident truth — that public sector spending must be reduced to help Australia through its economic difficulties. While decisions on education spending must properly form part of normal budget processes of priority determination, the assertion that the overall level of government spending must be reduced is itself one of the issues which should be fully examined when considering the contribution which higher education can make towards the alleviation of Australia's economic problems.

The principal reason for the weakness of the Australian economy is the large and persistent balance of payments deficit; all other problems — unemployment, low rates of growth, inflation, high interest rates, wage restraint, public sector deficits, overseas debt — have their origin in this. While the underlying cause of the balance of payments deficit has been the drastic deterioration in the terms of trade, it has been accentuated by policies which make it something of a self-inflicted wound. These include the deregulation of financial and foreign exchange markets, an indulgent tax system and the treatment of imports on a basis which is remarkably favourable compared with that of other OECD countries such as the members of the European Community, Japan and the USA. Australia with its resource-based economy is at the same time one of the most vulnerable and, at its own behest, one of the most open economies in the world.

Government policies are directed towards allowing imports to be determined by exchange rate adjustments and by fiscal and monetary restraints on the level of domestic activity, while encouraging through higher education and by other means the development of internationally competitive manufacturing and service industries. But the flood of imports has continued and any improvements in Australia's productive capacity and export performance will have to wait on long-term structural changes. In the short term, balance of payments stability will only be achieved throngh measures to control imports and capital movements, of the kind which would have been applied automatically in the 1950s and 1960s and which other countries continue to adopt. Just as there are limits to the extent to which the market approach can be applied to education, Australia is less qualified than almost any other economically advanced country to adopt a laissez-faire approach to its economic problems.

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Funding options in higher education

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A funding gap?

The Green Paper proposals are based on an indicative figure of 125,000 graduates per annum by the year 2001 (Green Paper p.12)[2]. This figure compares with 88,000 in 1986 (78,000 higher education graduates and 10,000 TAFE full-time course graduates). It implies an average growth in graduate numbers of 2.4 per cent per annum in the period 1986-2001. Such an expansion would raise the education level of the Australian workforce close to the current level in the OECD countries with the highest output of graduates per 100,000 of population.

There is some dispute as to the relative needs of our workforce for more training on the job compared with more formal education. There is less dispute that an expansion of places in higher education should provide the possibility of improved equality of access to higher education where many qualified students have not been able to obtain entry. And improved access to higher education should also improve the prospects for reform of the upper secondary school curriculum where the competition for entry to higher education acts as a major constraint on curriculum change. However, improvements in equality of opportunity may also depend on motivation and financial capacity to take up the available places, and these may depend on the way in which the places are financed.

With constant funding per graduate a growth of 2.4 per cent per annum in the number of graduates could imply a declining percentage of the GDP for higher education — if real GDP grew at 2.8 per cent per annum, the same rate as in the last decade (and within the range of 2.7-3.0 used by EPAC in recent years). In other words, if the Commonwealth funded the entire expansion of higher education its grants, which were 1.36 per cent of GDP in 1975 (Green Paper p.124) and one per cent of GDP in 1986, would fall to about 0.93 per cent in 2001.

A similar point has been made by McKinnon and by Marginson[3]. The so-called funding gap of $900 million to $1200 million in the Green Paper (p.80) is estimated on the assumption that the federal government spends no more than is already in the forward estimates for 1991 ($3000 million for higher education and part of TAFE). If this was all that was spent in 2001 then federal government outlay on higher education would be much less than the 1.0 per cent of GDP that was spent in 1986 — perhaps below 0.75 per cent by the year 2001 if GDP grew at 2.8 per cent per annum, and an even lower percentage if the GDP grew at a faster rate.

The Green Paper (p.79) notes that the estimates of outlay are incomplete and that attention should also be given to the backlog of equipment and capital needs. It also notes that expanding participation in higher education affects other items in the Commonwealth budget such as additional expenditure on schools for higher retention rates. Capital and equipment will require significant additional outlay but the additional costs of higher retention rates in schools should be seen in relation to the falling enrolments in secondary education that are currently occurring. This is a major factor which the Green Paper discussed earlier (p.14) in relation to future intakes into higher education but does not discuss in relation to overall outlay on education. The total of primary and secondary enrolments is projected to change very little in the next few years with growth resuming only about 1993. (An increase in retention rates to year 12 from 50 per cent in 1987 to 65 per cent implies an increase over current projections in years 11 and 12 equal to only about two per cent of total enrolments. The current projections show school enrolments roughly stable in total until 1993 and at two per cent higher than in 1986 in 1995.)

This means that public outlay on schools, which absorbs about 3.2 per cent of GDP or over 60 per cent of state and Commonwealth outlay on education is not likely to increase much in real terms over the next five years. As the GDP grows, outlay on schools, where total outlay is more than three times that on higher education, could fall as a percentage of the GDP.

Therefore the Green Paper should be viewed in a context in which the overall burden of education on State and Commonwealth Budgets is declining. In that context the Green Paper argues that expenditure on higher education should be expanded, though not in the main from Commonwealth funds. The Commonwealth Government wishes to fund a smaller proportion of the one per cent of GDP that would be sufficient at current standards to expand the number of graduates to 125,000.

Australia in comparison to most OECD countries is not a high tax country. It recently ranked nineteenth out of 23 in total taxation as a percentage of GDP.[4] The structure of taxes in Australia may well be in need of reform though our apparently high rate of company tax does not represent a high corporate tax burden compared with our trading partners when allowance is made for social security and payroll tax, and the exemptions from tax allowed for a wide range of purposes in Australia. Saunders in his study for the OECD noted that economic performance does not appear to be correlated with the size of the government sector.[5]

Overall Commonwealth economic policy is to reduce government expenditures. This policy has been adopted in the face of extreme though now slightly improving problems in Balance of Payments and overseas debt, problems which it believes must be remedied through expansion in private sector activities in import substitution and in export and through increased efficiency in the public sector. The stress on the private sector is noted by some critics, e.g. Ken Davidson and John Nevile, to be at the expense of the publicly provided infrastructure.

In the case of higher education the government is not arguing for restriction in expenditure: rather it is arguing that it should grow but that the growth not be funded by the Commonwealth. In assessing alternative sources of funds we need to consider in what ways they can be considered superior to funds raised through taxation.

The Green Paper (p.76) shows that CTEC funds have already declined as a source of funds for universities from 86.2 per cent in 1979 to 78.3 per cent in 1986 with the main increases in investment income, other Commonwealth sources, endowments etc. and other commercial activities. In advanced education the CTEC figure for 1986 was 79.7 per cent with State and other commercial activities being more important than for universities. Figures for 1987 and 1988 will include fees from foreign students.

Criteria for assessing funding systems

In reviewing alternative forms of funding we are in effect asking whether a dollar from business or from the States or from fees or from graduate tax is superior to a dollar from ordinary tax revenue. Matters to be considered in assessing any proposed system of funding include:

equity issues

". . . there would certainly be a fall in enrolment especially among students from poorer backgrounds."

- the extent of students' or their families' contribution to the direct costs of higher education;
- the effect on enrolments by age, socio-economic group, ethnicity, and gender (by type and level of course and institution and by region);

efficiency and effectiveness issues

- amount of revenue raised;
- administrative and other costs of the scheme;
- effects on total enrolments;
- effects on the distribution of enrolments among courses and between higher education and TAFE;
- effects on the type and quality of teaching and research;
- other factors affecting teaching and research such as institutional autonomy.

Alternative sources of funds

The major proposals under consideration are for:

- student fees together with a revised package of student grants or loans;
- graduate tax;
- contributions from business — endowments, levies, cadetships or traineeships, national training fund;
- state funding;
- commercial activities in higher education.

The federal government has asked the Wran Committee to develop options which could involve contributions from students, parents and employers. The Green Paper also proposes the distribution of Commonwealth funds after negotiation of educational profiles. This proposal has a range of implications but they are not considered in this paper which focuses on schemes directed at the total funds for higher education. Similarly, proposed changes in management and staffing are not considered here. A comment is made on some proposals directed at reducing costs per student.

Fees, loans and student grants

Many proposals are being made for fees, including the full-cost funding that applies to non-subsidised foreign students. The Department of Finance has made a submission which includes high fee options to the Wran Committee. However it is assumed here that only pro-

posals to meet part or all of the 'funding gap' would receive strong consideration from the Wran Committee.[6] The Green Paper does not make any suggestions as to the extent to which charges should vary by the cost of the course or the type of institution. Suggestions in 1984 made by the Minister of Finance, Senator Walsh were for a higher rate for universities than for colleges but this would now seem irrelevant with the proposed ending of the binary system. Given that some courses in TAFE are regarded in the Green Paper as higher education it may be considered that fees should also apply to them. Some of the implications for efficiency and equity of variations in charges by type of course are raised below.

Fees and equity

One reason why it may be equitable to charge fees is that students from higher socio-economic homes are over-represented in higher education, especially universities. On average, graduates from higher education earn above average incomes during their working lives. Hence a case can be made that they should bear perhaps some proportion of the costs of higher education.

While over-representation of some groups in total and in more prestigious courses still persists it seems there have been some gains in the last decade.

- participation of females and particularly of mature age females from a wide range of socio-economic backgrounds has increased markedly; there might have been some offset to these gains in 1987 when the new administration charge appeared to affect adversely re-enrolments and new enrolments of part-time students;
- there is indication of increased participation of the children with father in trades and manual occupations;
- the over-representation of the children of professional groups may have declined — they make up about the same proportion of enrolment but the proportion of fathers in professional occupations has increased substantially.[7]

In considering the prospective income of graduates it may be worth noting the decline in the 1970s (and possibly the 1980s) in the relative incomes of graduates, for males at least. For example the ratio of the mean annual income of full-year full-time male workers with degrees compared to those who left school at 16 and were without qualifications fell from 1.66 in 1973-74 to 1.41 in 1981-82 for the 25-34 years age group and from 1.85 to 1.72 for the 35-44 age group.[8] If the desired increase in the number of graduates from about 10 per cent of the labour force to about 15 per cent is achieved it could depress the relative incomes of graduates even further. And while graduates as a whole earn above average incomes, and suffer less unemployment, some graduates are not so fortunate. Also about half of all graduates work in the government sector. Many public sector workers would have lost ground relative to workers in the private sector in the period of partial indexation in the late 1970s, and unlike the well paid in the private sector have virtually all their earnings subject to PAYE taxation, still at somewhat progressive rates.

While it could seem fair to introduce fees because many students come from a good background and later earn good incomes, this dimension of equity must be balanced against the effects that the scheme has on lower socio-economic groups, who might as a consequence be deterred from entry. (Extra assistance would have to be provided as discussed in the following section.)

Not a great deal can be learned conclusively from the period following the abolition of fees in 1974 up to the introduction of the administration charge in 1987. Some improvement in the social composition of higher education was noted above. The abolition of fees accompanied by the introduction of TEAS in place of the Commonwealth Scholarship Scheme might have been expected to achieve even greater improvement in equality of access. However, a still larger offsetting factor was the removal of the biggest source of student assistance, the teaching scholarships. And as is well documented by CTEC, in its *Review of Efficiency and Effectiveness* in 1986, the maximum value of TEAS and the eligibility for it for those subject to the family income test failed to keep pace with inflation in the decade after 1974.[9] The 'result has been that less than 40 per cent of full-time higher education students now receive government assistance, compared with almost 70 per cent a decade ago'. In the late 1970s the proportion of school leavers moving into higher education fell and the proportion of 17 to 19 year olds in higher education only in 1987 regained the level it reached in 1975. In such a period it is unlikely that much improvement would occur in socio-economic composition.

The decade up to 1982 may not be a good indicator of the effects of fees on participation for another reason too. Retention rates to year 12 remained around 35 per cent in this decade, rising for females and falling for males. Research into transition to higher education from year 12 suggests that success in the year is the strongest indicator of likely transition and that family income by this stage is not an important factor, though it may affect type of course. However, since 1982 retention to year 12 has risen rapidly to 50 per cent in 1987 and is to be encouraged to rise towards beyond 65 per cent. Many more students from lower socio-economic background will be undertaking year 12 and may be more sensitive to the effects of fees than students of the past. Furthermore such students may be affected by the symbolism of free education as indicating to themselves and their families that it is desirable and socially acceptable for them to proceed to higher education.

If fairly substantial fees were introduced for higher education with no change to student assistance there would certainly be a fall in enrolment especially among students from poorer backgrounds. Part-time students would be discouraged. There would be an incentive to enrol in cheaper, shorter courses and in TAFE (presuming it had lower or no fees) rather than higher education, further stratifying higher education from TAFE. It is also possible that students from non-metropolitan areas might be relatively more affected by fees and that the attractiveness of country institutions would be reduced perhaps affecting provision and access in the country.

Grants to students

To lessen these consequences a quite enhanced form of student financial assistance would have to be introduced. This student assistance would have to include sufficient funds to cover fees and at least the current level of assistance with living costs provided by Austudy. The assistance would have to be extended beyond those currently eligible for Austudy, which is increasingly targeted on the very lowest income groups. The large proportion of households not far above eligibility for Austudy would otherwise be severely affected by the introduction of fees.

An example of the effects of a fee of $3000 was discussed in detail by Manning in 1986.[10] He showed that in 1983 more than 60 per cent of the revenue collected by fees would have had to be provided in grants to students if the burden on lower to middle income families were not to be increased. (There would also be an increased incentive for students to seek independent status to obtain the much larger assistance to cover fees as well as living expenses.)

On Manning's calculations it would be necessary to extend eligibility for allowances 'to approximately 80 per cent of the dependent student population, with three-quarters of these eligible at part rates'.

> *Herein lies the Achilles heel of the proposal to take tertiary education out of the government budget by imposing fees made palatable by an expanded allowance scheme. The proposal involves assessing nearly all students for grants, as against approximately one-third now, and would impose high marginal effective tax rates on a majority of students' parents. (Manning p.7)*[11]

(The high marginal tax rate is the result of the combined effect of personal income tax and abatement of the student allowance as family income rises.)

In addition it would be necessary to provide some form of student assistance for part-time students if they were not to be particularly disadvantaged by the introduction of fees.

The Department of Finance in its submission to the Wran Committee considered an option of grants or exemption from fees to students able to demonstrate sufficient financial need 'or a combination of merit and need'.[12] The Department provided an illustration for a fee averaging $3000. Its 'equity package' involved exemption from fees for Austudy students and partial exemption for students only marginally excluded from Austudy. (The basic income test threshold on parental income in 1988, with additions for other dependent children, is $16,000.) Such a package 'would achieve net budgetary savings over time of around $500 million only' — that is, less than half the amount that would be raised if all students paid the fee.

"In the US there is a 'bewildering and complicated' range of grants, subsidised loans and work study opportunities. . ."

Student loans

Aid may be in the form of loans in addition to grants. A combination of grants and loans is a feature of student aid in Scandinavian countries (where no fees are charged) and in North America (where fees covering around 20 per cent of tuition are charged for the large majority of students who are in public institutions, and much higher fees for the small minority in private institutions). Loans may be provided by the government or through private financial institutions, with government guarantee. They may be at commercial or subsidised rates of interest. Their repayment may be made contingent on the ex-student's level of income.

As discussed by Woodhall (1982) under the centrally administered scheme in Sweden all students in higher education are considered independent of their parents, with a means test for grants and loans solely on their own income.[13] About 80 per cent of university students receive loans to assist with their living costs. Repayment of loans is deferred for two years after last receiving aid or if income falls below a set level. No interest was charged when the loans system was introduced in 1964, but the debt was indexed to the cost of living. However, during the period of high inflation this was changed to an annual adjustment, set at 4.2 per cent in 1982, so in effect the loan is heavily subsidised.

In the US there is a 'bewildering and complicated' range of grants, subsidised loans and work study opportunities, with major changes during the Reagan years. Federal programs provide assistance for low income students through grants and heavily subsidised loans. There is also government guarantee of private loans and subsidisation of interest during the study period for low to middle income background students.

Loans in their early years, if provided by government or if heavily subsidised by them, may make a substantial claim on government revenue, and be little different from grants in their effects on revenue. Even in the longer term the subsidy to interest payments may amount to a considerable proportion of the cost of the loan. There will also be administrative costs in providing loans and/or grants. Defaults can add to costs too. Defaults approaching an average of 20 per cent occurred in the US in the 1970s. The rate of default has escalated since then to the extent where payment of defaults on private loans under the Guaranteed Student Loan Program ranks as the third largest payment of the federal Department of Education.[14] However, defaults on loans have been less than five per cent in Sweden, reflecting the various contingencies in repayments and overall administration of the scheme. (Less than one per cent of funds have been lost through borrowers leaving Sweden.)

Woodhall in her cross-country review claims that it is not at all obvious that the existence of loans is associated with lower participation rates of women or students from lower socio-economic backgrounds. A variety of factors affect participation rates. Whether the introduction of fees and loans in Australia would have a marked effect in discouraging enrolments in the short term or long term is hard to judge and would vary with the extent to which grants were also retained and with the extent of subsidy for the loan scheme. The short term effect at least could be marked on those from backgrounds with no previous experience of higher education, and who must be attracted if the graduate targets are to be realised.

Fees and efficiency

Proponents of free market education see increased efficiency and effectiveness in a system financed from student fees, as institutions compete in the type and cost of courses provided.[15] Karmel suggests that the major arguments for the effect of market forces on efficiency apply in the case of high or full-cost fees rather than a more nominal fee.[16] It seems doubtful even with high fees that the 'institutional structure within which higher education operates' could 'be made to simulate an atomistic competitive model . . .'[17] The suggestions in the Green Paper for the reduction in the number of institutions, the negotiation of profiles directly with the Commonwealth in relation to national priorities and the stress on avoidance of duplication of courses, would suggest that the competition promoted by market forces may be somewhat constrained. In any case the pressures may be but slight on the old prestigious institutions like Melbourne University.

The effect of fees on the efficient use of resources in institution is hard to judge. At present individual university faculties are very conscious of the limits on their budgets and the opportunity cost of any activity they engage in. They also try to provide courses that attract students to maintain or increase their budget allocation. A worry is that they may go too far in pursuit of students to the neglect of what they might judge to be appropriate course content, and standards. Many departments already provide short courses for fees, and provide full cost courses for foreign students, courses in which the pressure to have a reasonably high pass rate may create some tension about standards.

Nor is it obvious that the allocation of students across courses to meet the needs of the economy would improve in any noticeable way through the introduction of fees. Students paying fees may tend to take more obviously vocational courses. The outcome would differ according to the system of fees under consideration and in particular as to whether fees reflected the cost of provision of the course. They may not move towards the sciences or technologies for which fees, if they at all reflect costs, might be higher than for humanities etc. Even if fees were set at the same level as for humanities enrolments in science and technology would seem to depend, as at present, largely on the number of students with sufficient aptitude and motivation to enrol, and on the signs that good jobs were really plentiful in these areas.[18]

Some final comments on fees in relation to efficiency and effectiveness:

- The old argument that students paying fees will be more motivated and hence pursue their studies more diligently is difficult to assess. Full-time students

already bear a considerable cost in earnings forgone. The introduction of fees might lead to an increased engagement in the labour force. While some part-time or sandwich type work could be beneficial to study a considerable burden of work is likely to reduce student progress as evidenced by the lower graduation rates of part-time students. Furthermore though data on graduation rates is rather sparse there does not appear to be any evidence that student progress was better before fees were abolished in 1974.

- The autonomy of institutions may be increased with funds coming from more than one source. It could be argued that the marginal additional funds from alternative sources are very important to the autonomy of institutions. Against this it might be thought that this is a minor matter affecting autonomy compared with the process of reaching agreement with the National Board of Employment, Education and Training to maintain or increase Commonwealth funding.

Fees and private universities

The introduction of fees in publicly funded institutions makes the establishment and growth of private universities much more likely. The relative cost of attending private institutions will be reduced by the size of the fee in public higher education.[19] These institutions will not be subject to the direct influence of NBEET. If they were to enrol more than a marginal number of students they could begin to affect public institutions. It is a matter of speculation and values that this influence would be for the good. The expansion of private primary and secondary schooling in the last decade, in part due to the expansion of public funding of non-government schools, is seen by some as diminishing equality of opportunity and promoting conservatism in school curriculum and assessment. Some see this conservatism as a good thing.

Fees and second degrees

The option raised by the Department of Finance that full cost fees be charged for second degrees needs some comment.[20] The implications of this for the retraining or further education of the adult population have not been well outlined. It may lead to an overall decline in post-graduate course and research degrees and its impact may vary greatly by field of study. Enrolments could grow in specialist masters degrees in Business. Rewards in increased salaries could be expected and employer subsidy of fees might occur. However, a sharp decline could be expected in one major area of further study — education. (Nursing and social work might be similarly affected.)

It is generally agreed that teachers should continually engage in further study and undertake both specialised and broadening experiences. This view is held more strongly with the fairly rapid ageing of the teacher workforce, following the slowdown in recruitment and the fall in resignation rates in the late 1970s. CTEC statistics suggest that many do engage in further study: the largest number of course work masters degrees in universities are in education and the largest number of graduate diplomas in colleges.[21]

A study of graduates from the course work masters degree at Monash indicated that most found their studies rewarding, but not financially rewarding. A reason for this is that the prospects of promotion are poor. In Victoria about 40 per cent of secondary teachers employed in government schools are at the top of the assistant teacher salary scale, a level that they reach after seven years teaching.[22] (They have T-shirts with 'Is there life after subdivision 14'.) Though their relative salary prospects are far worse than for teachers prior to 1974, the fees if introduced will hit them harder — government school teachers then were exempted from half fees.

A decline in teachers' participation in graduate studies in education also has implications for research in education by students — and by staff if staffing of graduate faculties remains somewhat linked to student numbers.

Graduate tax

The provision of higher education without fees but the later recoupment of at least part of the cost of tuition through an additional tax on graduates is receiving consideration. The idea has appeal in not adding fees to the financial problems of living costs. It therefore does not create so obviously the deterrent to lower or middle income students that fees might. It would reduce the disposable income of graduates and therefore the expected returns to higher education. This would tend to somewhat reduce demand for higher education, making the attainment of 125,000 graduates in 2001 more difficult.

There are some, probably minor, issues in fairness with a graduate tax that are not easily resolved. It is not clear for example how much of the additional income received by a graduate is due to higher education. Some of it may be due to the motivation and ability that led to success in school and higher education. (Estimates of returns to higher education after removing the effects of socio-economic background and academic performance in high school have been made in the US but not in Australia.) For example should a successful business person who happens to be a graduate pay a higher personal tax rate than Alan Bond.

Such matters of fairness vary with the type of graduate tax under consideration. It is assumed that the graduate tax would apply only to future graduates which could lead to some resentment of existing graduates. Murray Wells of Sydney University advocates a scheme in which the tax office in effect collects a loan. The tax office debits a student's tax file with a set amount for each year of study (e.g. $5000 each year or $15,000 after a three-year degree). No collection is made until the graduate's income exceeds a certain level, say $30,000, and 10 per cent of the debt is then levied each year. In this case, as Botsman has noted, if exemption is given to low income earners the relative burden will fall most heavily on middle income earners as they pay the same amount as the rich (or more if the rich can reduce their apparent incomes below $30,000).[23] In contrast Eade of Footscray Institute recommends a one per cent levy on personal tax, with exemptions for incomes below $12,000, for a 10-year period after graduation.

Perhaps of more importance is the point raised earlier about the high percentage of graduates in public employment and subject to PAYE rates. It may be they believe that they already pay a higher rate of tax than Alan Bond.

If a graduate tax were introduced but students who chose to pay fees were permitted to opt out of it we would have in effect an income contingent loans scheme. This may have some attractions compared with other forms of loans schemes and there are elements of this in Sweden.

A graduate tax has the disadvantage compared to fees in not making an immediate contribution to revenue. As with a government funded loans scheme the funds raised are in the future, probably beyond the life of any government introducing the scheme.

The efficiency aspects of the graduate tax are of some concern. One problem is how to collect the tax from graduates who migrate, and the minor incentive to migrate. The administrative problems of working out appropriate rates of tax according to length of course and cost of course are probably not too great, but it would lead to a slightly more complicated system of personal income tax at a time when the government is seeking to simplify the structure of rates.[24]

Business contributions and other funds

The government has exhorted both industry and higher education to extend their relationships. The larger universities in particular have sought and received endowments. And contracts and donations for various forms of research and teaching have become more common in colleges and universities (Green Paper p.76). Special tax concessions for research

"One of the indirect consequences of the introduction of fees for foreign students is the pressure it produces to introduce fees for Australian students."

may stimulate contributions to research (but to date appear to have little impact on the total). The extension of cadetships and research scholarships by public and private sectors and employers' subsidisation of any fees introduced are possibilities for consideration.

There have also been proposals for compulsory contributions in the form of a levy on industry. *Australia Reconstructed* has a proposal for a National Development Fund financed by a tax on the income of superannuation schemes and a National Employment and Training Fund financed from a levy on employers.[25] Such funds include training and paid study leave in their areas of concern and would involve TAFE. These concerns might be extended to higher education.

Equity and efficiency arguments are not so obvious as in the consideration of fees. Funds donated by business are likely to be directed to priorities of concern to business in teaching and research. This should improve the efficiency with which research and teaching meet the perceived short term needs of business. But it may distort the priorities of higher education from more fundamental and longer term issues. Country colleges even if they become associated with city institutions may not have access to much funding from business.

Funds donated by business might be at the expense of other training or research activities that the firm might engage in. The view has been expressed that the real training shortage in Australia is on the job and that business should turn their attention there rather than to formal education.

The prospect for industry levies, at least compulsory ones, seems remote given the trend towards simplification and reduction in company taxes. The establishment of a fund based on a levy on superannuation funds should not be so readily dismissed. Since the major reason for reform to the funding system is the desire to contain or reduce regular taxes any alternative form of tax needs careful consideration.

State funding

Public higher education institutions are establised by State governments and their co-operation with the Commonwealth is essential for improvements in efficiency and equity. The States, Victoria in particular, have re-entered the funding of higher education in recent years as part of the cost of establishing college-based nursing and to increase enrolments by youth in post-secondary education. State funding can therefore be important to equity and also may be of importance as it relates to autonomy in providing yet another source of funds. It could also be important to the achievement of State educational, social and economic priorities. State funding, however, is exceedingly pressed by restrictions on Commonwealth grants to the States.

Commercial activities in higher education

Funds are raised through consultancy for industry and government, the provision of short courses and the provision of full-cost courses (mainly) for foreign students. Encouragement for staff to engage in consultancy may increase the contribution of higher education to industry and government, and help to retain good staff in areas where salaries in industry are very attractive (though if staff retain the funds may do little for tertiary institutional funding). The effects, good and bad, may be similar to the increase in business endowment.

The provision of full-cost courses to foreign students is a new feature of Australian education and its contribution to funds not yet clear. They are expected to yield gross revenue in excess of $100 million in 1988 for all levels of education and hence contribute to the balance of payments. The fee levels in higher education are set in excess of marginal costs and hence contribute to overheads, though it is not clear that this will provide much towards the provision of extra places for Australian students. However, there is likely to be considerable variation by type of course.

One of the indirect consequences of the introduction of fees for foreign students is the pressure it produces to introduce fees for Australian students.

The Commonwealth has substantially increased the Overseas Student Charge to subsidised students (to 55 per cent of full average cost to those commencing in 1988). Receipts of about $64 million are expected in 1987-88 compared with $49 million in 1986-87. These funds are an addition to the revenue available to the Commonwealth to finance higher education but do not directly affect the finance received by colleges and universities.

Cost saving

The Green Paper suggests various changes to administration and to staffing and amalgamation of institutions which it hopes will improve the efficiency of higher education. CTEC had considered issues of efficiency and effectiveness in 1986 and had also recommended changes, though it concluded that funds per student could not be reduced further, particularly if enrolments were to expand in the sciences and technology. There might appear to be some economies of scale to be achieved in universities but existing cost schedules may reflect the current pattern of allocation of resources by CTEC as much as the production process, i.e. larger institutions may cost less per student because they are given less.

Concluding comment

The funding gap considered in the Green Paper exists only on the assumption that there should be marked reduction in the burden of higher education on the Federal Budget. This reduction is sought at the same time as demographic change is reducing the burden of primary and secondary education on State and Commonwealth budgets.

The size of any contribution to revenue from fees is largely dependent on the extent to which offsetting payments for student assistance are made. If the objective of expanding the number of higher education graduates by 40 per cent is to be achieved a much higher proportion of lower socio-economic groups will have to be enticed to enrol. Student assistance may have to be increased even if fees are not introduced.

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Vouchers, loans, and equity

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Introduction

In a previous paper I discussed the voucher system in relation to primary and secondary education.[1] I made the point that vouchers are defended by two quite different and conflicting arguments: that they would ensure free-market competition on the one hand and promote equity on the other. I discussed various types of voucher systems and examined the American evidence. I concluded that

1. There was no evidence to show that vouchers would improve school achievement
2. Many of the arguments in favour of vouchers in the United States do not work at all in New Zealand, and
3. For a voucher system to have a chance to foster equity a massive upheaval in the social and educational system would be necessary and would involve enormous expense to the government.

I want now to extend the discussion to the post-compulsory phase of education in New Zealand and to consider how various proposals such as vouchers, means tests and loans stand up to the demands of equity.

Hugh Lauder has shown how the various sections of education are perceived by the free-market proponents as requiring similar treatment.[2] Having discussed the place of vouchers for school-age children in this philosophy, Lauder quotes from a Treasury document which suggests advantages in 'improving the *pricing* of tertiary services . . . and implementing *differentiated* government financial support for students. In the long run, private suppliers . . . could be encouraged to participate'.[3]

Vindication of the belief that 'The New Right' see all levels of education in similar market terms is provided by a document emanating from the Centre of Policy Studies in Australia.[4] Having discussed at length the function of schools and summarised some evidence about their cost-effectiveness, the writers turn to tertiary education:

> *Tertiary education will be dealt with more cursorily, partly because it costs the taxpayer about half as much as primary and secondary education, and partly because much of what has been said about the schools is applicable to it as well.*[5]

In the light of these statements and recent proposals it seems useful to extend the earlier discussion to tertiary funding. I shall not deal directly with the central ideological assumption of writers such as those I have just quoted. They view education as a commodity which is precisely analogous to other individual consumer items or services such as motorcars, foodstuffs, and transport. This view of education has been rebutted so many times that anyone who still holds it will not be convinced by any arguments of mine. Rather, I shall concentrate on the equity issue which is constantly dragged like a red-herring across the path of the hunter tracking the free-market, competitive, privatising quarry. Thus, for example, Freebairn et al having criticised the cost of tertiary education and its 'inefficiency' (as measured by drop-out rates and the like) go on to say 'tertiary student allowances are subject to the same objection as is the failure to charge fees, viz. they represent a transfer to a relatively privileged group'.[6] It is this kind of claim that I shall be focusing on although claims about relative costs and savings will not be ignored. I shall deal with three separate but related issues — vouchers, means-tests and loans.

Vouchers

In a very loose sense a voucher system has operated at tertiary level in New Zealand for several years. Students entitled to a Tertiary Study Grant (previously called the Standard Tertiary Bursary) receive the same basic entitlement regardless of the institution attended (University, Polytechnic, Teachers' College) or the course taken. In addition, a live-away allowance is paid to those who are required to study at a distance from their home; there is a means-test based on the student's personal income (not, it should be noted, the income of her parents).

In New Zealand, the bursary has not been extended beyond tertiary institutions. It is useful, then, to consider an interesting experiment in the United States where a direct voucher system was tried outside the normal tertiary institutions. In early 1974, the Bureau of Social Science Research, under a grant from the Manpower Administration, designed an exploratory programme to test the feasibility of vouchering institutional vocational training. The programme chosen for vouchers was an existing one — the Work Incentive Programme (WIN). Portland Oregon was selected as a test site and the first vouchers issued in April 1974.[7] The experiments were later extended to other cities. The experiments were evaluated by comparing them on a number of variables with existing WIN programmes which were not vouchered. The major variables used were: (a) job satisfaction, (b) costs, and (c) length of training.

In terms of job satisfaction there were significant differences between client groups. In general, vouchered training increased job satisfaction for those in technical areas, those with low educational attainment and those on low wages; it decreased it for clerical and blue-collar workers and those with more than twelve years schooling.[8] The following tables 1 and 2 provide a summary of relative costs and length of training:

Table 1: Costs of vouchered and non-vouchered programmes

Tuition, books, etc. (p.a.)	vouchered %	non-vouchered %
free	—	2
$500	30	46
$500-999	24	42
$1,000 +	46	10

Table 2: Length of training programmes

	vouchered	non-vouchered
< 4 months	16	14
4-6 months	12	70
> 6 months	72	16

The findings set out in these tables cannot be adequately and conclusively accounted for. As the evaluators point out there are many interrelating factors: the cost of a course is obviously related to its length, courses tended to be shorter for women than for men, and vouchers encouraged people (particularly men) to shift to higher-cost training. They conclude: "We do not yet have available the true relative cost of voucher training".[9]

Yet, noting that private agencies raised their costs for everyone prior to the voucher experiment, the authors believe that vouchered training will cost substantially more than regular WIN training. And in terms of equity they note that the people most attracted to the scheme were younger, better educated, white women. They conclude that it is 'an administratively feasible programme, and it clearly merits further and more detailed study'.[10]

It would not be surprising if vouchers in this area were more defensible and successful than those in the years of compulsory schooling:

(a) Those in school are 'children' who are presumed not to know what is in their interest so their parents choose for them; those in a vocational programme are adults who are presumed to know what they want and be able to exercise free choice.
(b) Schools deal with 'education', where disputes about aims, curricula and procedures are widespread and perennial. The vocational programmes, however, deal with reasonably straightforward vocational skills (typing, pottery making, machine work and the like) which can be clearly designed by the instructor and assessed by the learner.

For these reasons, a government wishing to try out a voucher system might begin here. The WIN data would suggest that the government should not expect the scheme to save money. Since we know from other sources that this kind of vocational training is virtually useless in solving unemployment,[11] the question might be asked what the point is in providing vouchers for skill training which may be of little benefit to the individual or society. Perhaps one must take a broader view of the activities that are worthwhile in the early post-school years.

Grants and means-tests

When higher education was the preserve of the wealthy, it was accepted that costs would be borne by the family of the student. As countries extended provision to children of the less well-to-do, it became necessary to transfer most of the direct costs to the state and the remainder to the student to be met by grants, loans, or a combination of both. In all countries today student funding is a variable blend of these factors. Thus, for example, Denmark provides a reasonable basic grant, supplemented by low-interest government loans and, beyond that, government guaranteed bank loans. Sweden provides a grant to all between 16 and 19 (to encourage retention rates in secondary education) and a combined grant (now a mere 6% of the total aid) and loan (now 94% of the aid) for those over 20. The United States operates almost entirely by loans and in Australia and New Zealand tertiary education has rested almost entirely on grants. In the systems relying heavily on grants, there is usually some form of means-testing. Denmark means-tests both the students (of all ages) and their parents (for students 18-22) though it is planned to lower the top age to 20 to encourage earlier study (Gaines & Turner 1985). Until 1974 Australia relied on a means-tested Scholarship Scheme which reached some 42% of students (though only 11% received the maximum allowance). New Zealand has never invoked a means test on parental income but there is one on the students' own income.

To investigate the theoretical issues, I propose to look at the Australian experience. Here we can see some evidence relating to a documented change of policy made in the interest of equity where, it is claimed, the desired results were not forthcoming and hence strong moves were made for means-testing and the replacement of grants with loans.

It is important to take time to trace the history behind policy changes. One cannot assert globally that, for example, universal grants do not promote 'equity' or 'means tests do foster equity' without reference to the social background against which such claims are being made. To ignore that leads one to what I might call the 'access to alcohol fallacy'. In New Zealand, the liquor lobby has made enormous strides by arguing every few years that 'civilised nations can get alcohol (with their meal) (in the evening), (at a restaurant) (in a cafe) (in the supermarket) etc etc without any overconsumption of alcohol'. And politicians and people have again and again accepted the argument. The result has been a constant escalation in alcohol consumption and the social problems going with it. The con trick has of course been to ignore the fact that whatever the situation in Spain, France, or Germany, New Zealand has its own alcohol-consumption tradition rooted, as Jock Philips shows so well, in the male image of a frontier society. Against this tradition the 'civilised' drinking proposed is powerless — it merely adds to the outlets, and leaves the bar swill and football parties untouched.[12] In a similar way claims about the effects of types of financial assistance are meaningless apart from the historical development and social background in which they are situated. The case of Australia may help here.

As we have seen, prior to 1974, student funding came from a means-tested Commonwealth Scholarship Scheme (complemented with special higher bursaries for teachers. As in NZ, the significance of these for equity has not been documented but was probably very significant.) In 1974, the Whitlam government implemented full federal funding of universities, the abolition of tuition fees, and universal grants (TEAS). The hope was that these steps would greatly improve access for groups hitherto underrepresented.

Later, in a very different social and political climate, it was argued that the 1974 changes should be reversed, fees should meet actual costs, the grant should be reduced and loans be made available to supplement the grants. The reasons were, of course, centrally economic ones but the Williams Report (1979) also argued that the 1974 scheme had not produced equality but additional support for the wealthy.

In support of the claim a 1976 study by Anderson et al was cited to show that only 20% of the students surveyed said they would not enrol or would delay enrolment if fees were charged. Taking this claim seriously, a number of points can be made:

- Is 20% such an insignificant number if one is concerned with equity?
- The 20% are those who in a questionnaire said they would not enrol. This says nothing about those who would in fact not enrol or would drop out for financial reasons after enrolment.
- As Marginson shows in a re-analysis of the Anderson data, it is not a uniform 20%: the male figure was 19%, the female 24%. Women may be deterred more than men by fees. Similarly, students in country colleges yielded a negative figure of 30%; thus, concludes Marginson, the effect of fees might well be to make 'tertiary education a metropolitan monopoly'.[13]
- Craney and O'Donnell repeated Anderson's questionnaire. Whereas in 1976, 21% of full-time students (22% part-time) said they would not enrol or would defer, in 1979 41% of full-time (39% part-time) gave these responses.[14]

They put the changes down to 1. The changing employment situation which may make the prospect of fees more daunting (vacation work being difficult to get) and 2. the 1979 study was carried out on Education students, the group from the lowest socio-economic level.

Don Anderson, the senior author of the 1976 report, has recently reviewed the evidence on tertiary student funding and the social mix. He says:

My most recent evidence shows that, after decades in which there was no change in the social spectrum, at the end of the 1970s a shift had begun towards equality among the groups of school leavers entering higher education.[15]

He gives the following table:

Table 3: Enrolment rates of school leavers in full-time higher education in Australia

Social Group	Enrolment Year		
	1960	1972	1979/80
1	23.8	27.9	20.8
2	11.4	20.7	14.0
3	6.7	14.0	10.3
All	13.4	20.2	15.1

Finally he concludes that financial barriers do inhibit the enrolment of students from certain disadvantaged categories.

The significance of this for New Zealand is that, although the existence of the Tertiary Study Grant has not promoted the social equality that many believe to be desirable, its removal or reduction would surely function as a disincentive to those groups whose motivation is already very fragile (ethnic and lower socio-economic groups), and those whose financial situation is dependent on the goodwill of others (women without a personal income).

For this reason, most contemporary proposals do not advocate the total removal of grants. There is a good deal of talk about 'targeting' such funds, and this, of course, inevitably involves means-testing. The Watts Report, for example, says:

As the amount of money available for assistance to students is a limited but nevertheless significant sum ($75 million in 1987), it is important that assistance be concentrated to encourage more students from lower income families and other disadvantaged groups to attend universities. This would require a stronger element of means-testing of incomes than currently exists.[16]

Since there already is a means-test on the student's own income and since few students have an income which affects tertiary assistance, the proposal must involve a means-test on students' parents.

There are those who argue against means-testing in any circumstance. This, in my view, is too extreme a position. There are situations in which low-interest loans, family support, or old-age pensions are appropriately related to the income of the claimants.

There are, however, good grounds for rejecting means-testing of parents for their child's tertiary education:

- The scheme would be socially divisive. We know (roughly) the groups which would qualify for full assistance — Maori and Polynesian families, and the children of the less skilled and the unemployed. These groups are already lacking in self-esteem and it is undesirable to create in our tertiary institutions two classes of students: those 'paying their way' as they would soon learn to say and the 'scholarship kids' who are there thanks to a generous state and to the 'subsidy' being paid by their betters.
- Although it is true that students in New Zealand are drawn disproportionately from the higher socio-economic groups, these are not necessarily groups with high incomes. The measure of SES is a mixture of income and educational levels and hence many parents who would figure in levels 1 or 2 do not in fact have high incomes and are certainly not wealthy. An Australian study in 1979 showed an interesting distribution of parental incomes:

<$5,000	10%
$5-10,000	16%
$10-15,000	23%
$15-20,000	18%
$20-30,000	18%
$30-40,000	6%
>$40,000	5%

Higher Education Round Table, n.d.[17]

A means test in these circumstances (even if progressive, as Watts recommends) would strike at the large group (over 40%) of students whose parents earn between $10,000 and $20,000 and can scarcely be called rich (the average income in Australia in 1979 was $12,466).

- It is not reasonable to make a student's income related to that of her parents when there is no obligation on parents to support their offspring through a tertiary course. The NZ Students' Association found that 60% of students received no financial assistance from parents and 30% received less than $1000 per year. The amount provided did not correlate with parental income; those earning $5000 to $10,000 per year were more generous to their children than those earning in excess of $40,000.[18] A means-test on parents leaves children's tertiary education to the vagaries of their parents' prejudices. Many parents, for example, still believe that higher education is wasted on girls and some, of course, hold that it is wasted on anyone: 'get out and get yourself a good job' is the attitude.
- Forcing young people to be dependent on their parents for indefinite periods is, I believe, wrong in principle. The tasks of growing up can be assumed

"This view of education (free market) has been rebutted so many times that anyone who still holds it will not be convinced by any arguments of mine."

only when one has some physical, emotional, mental and financial autonomy. The student who at present is entitled to a study grant and perhaps a boarding allowance acquires a sense of dignity in being (at least in principle) independent of her parents. To revert to a dependent situation would encourage the immaturity which in other contexts society deplores.

- The question can also be raised why such means-testing should be limited to the tertiary level. There is a similar imbalance of class and ethnic groups in the senior secondary school. Any genuine attempt to 'target' less favoured groups would need to begin at least as early as the third form. If differential financing is accepted, the argument against 'free' education for the children of the well-to-do would be difficult to resist.

I would argue, therefore, that all eligible students be paid a realistic living allowance. Contributions from parents whether in the form of money or lodging would be added to the student's total income which would be taxed.

It will of course be argued that this sort of scheme is expensive and hence is unrealistic in the current climate. I believe, however, that the financial savings which are presumed to follow from alternative schemes are grossly exaggerated. These financial arguments will be examined in the next section.

Loans

As we have seen, the third way of financing tertiary study is by a system of loans which come from the private sector, the state or a combination of the two. Many countries have a loans system of some sort and the recent Watts report recommends a 'back up' loans system which is 'state subsidised and guaranteed'.

In a society such as ours one could scarcely argue against the availability of loans for educational purposes as for homes, cars, or trips abroad. The main questions, however, are: 1. how the loans relate to other financial schemes such as grants and tuition payments, 2. how they are secured and repaid, and 3. who provides them.

Lauder points out that, 'there are a plethora of loans systems'[19] and Gaines and Turner have exhaustively examined four of these: Denmark, Sweden, the USA, and Canada.[20] As the Swedish system is widely accepted as the most successful, I shall outline its main features:

- Students over 20 are supported at 140% of the base standard of living rate.
- The total support has a grant portion and a loans portion. In 1975 75% was in loans and 25% in grants. This proportion was set in order to ensure that working class students (who are reluctant to borrow) would not be severely disadvantaged. By 1985 the proportion was 93.5% loans, 6.5% grants.
- Loans are administered by a government body. There is no private commercial involvement.
- The support system is means-tested against the student's income including capital items (such as home).
- Families of all students 16-19 in non-compulsory education receive financial support which is non-repayable (approximately $120 per month per student). All parents have a legal obligation to support their children's education. The original motivation for this universal grant was to foster equity at a lower level than tertiary study. Some 90% of the 16-19 year olds remain in education.
- After 20, students are regarded as independent of their parents and eligible for the grants/loans mentioned above.
- Loans are repaid over 20 years at 4.2% p.a. There is no tax relief on these repayments. A graduate whose income in any year is below a set figure has her repayment postponed for that year. Some 14% seek such deferment but default on loans is rare, some 98% meeting their obligations regarded widely as 'a civic duty'.
- The participation rate of women is satisfactory except in technological and vocational subjects. This is not thought to be due to financial constraints.
- The ratio of working-class students to others has decreased over the twenty-one years. In the past ten years participation by Social Class D and E has decreased by 11%, while Social Class A has risen by 13%.[21] This brief account highlights the fact that in discussing loans schemes it is important to keep in focus both the national ethos and the total financial package. In the 1960s the Swedish government embarked on a programme to provide all students with access to higher education both by financing retention after 16 and by providing adequate allowances to all after 20. In this context, and given the national ethos concerning 'civic duty' the loan/grant combination beyond 20 years seems to work well and to be acceptable. As the British AUT says in its document:

  Given the much easier access to Swedish higher education and the government commitment to aid students (without regard to any parental or family contributions) for eight years if necessary, obviously a purely grants system would be prohibitively expensive ... Additionally in Sweden a number of grant fellowships are available for graduate students as well as teaching, administrative and research posts to help finance their studies.[22]

In turning, therefore, from Sweden to New Zealand, the argument that loans are fairer than grants and should replace them must be rejected. The argument, a curious mixture of free-market economics and pseudo-egalitarianism, takes off from human capital theory and assumes that education is purely or largely a benefit to the individual. The argument then is that those who benefit financially from their higher education should repay some of the cost of it.

As I have argued elsewhere even if we do focus on individual advantage, the argument overlooks two points about remuneration policy:[23]

1. In our society the assumption is that some people should be paid more than others. Some of the criteria used for extra payment are: the degree of responsibility, the scarcity of the skills, the years of forgone earnings, the disruption of family and social life, the danger or unpleasantness of the tasks — and the like. The amount of education required is, therefore, only one of a number of complex factors used to determine pay rates. If we assume that society has correctly applied relevant criteria why should some economists push the idea that in one case (and in one case only) the recipient of the higher salary or wage should be financially penalised for receiving the agreed incentive?

2. There is a well-established mechanism for 'claiming back' money from high earners and redistributing it to low earners. This is, of course the progressive tax. Without supporting any particular scheme, I believe that taxation policy is the proper place to argue about economic equity. For here there is some chance of recognising the 'haves' and the 'have nots' regardless of the complex social mechanisms by which the two groups are produced. Thus, I would argue that (other

things being equal) the tax on a police officer earning $35,000 pa should be the same as that of an accountant earning the same amount. The fact that an accountant is (presumably) being compensated for her years of training and the police officer for the danger of the job seems irrelevant. This after all is what the salary incentive system is for. A surcharge on education does not make sense.

It is instructive to note that those most keen to use equity arguments to promote loans, adopt a totally different stance on income tax. Those egalitarian tears are surely crocodile tears and no genuine self-respecting liberal should heed them.

It is, of course, important to keep government spending within bounds but it is not obvious that a massive loan scheme would help much. The British AUT estimate that about half the money 'saved' on loans goes to administering the scheme and there is evidence that it takes a very long time to get such a scheme anywhere near self-supporting.[24] Even in the USA, after thirty years of the scheme only half the new loans are coming from repaid loans.[25] Finally, of course, as every free-marketeer knows, the market has its own way of adjusting to this kind of social planning. Those with heavy loans to repay will seek and probably gain tax relief; professionals in private practice will adjust their fees to meet their loans; unions will endeavour to recoup loans for their members in salary claims. The state which employs large numbers of graduates may soon find itself repaying its own loans in the form of increased state service salaries.

Nevertheless, a modest form of loans to supplement a basic grant is, I believe, acceptable to tide a student over a lean period or for living expenses in periods when work is hard to come by. Paradoxically I suppose, I would hope that the state keep out of this area, for the following reasons:

- As was shown in Sweden, there would be a temptation to reduce grants and increase loans.
- The relative ease of borrowing might encourage young people to take on loans which are too high.

I would prefer, therefore, for modest loans to be provided as they are now on a commercial basis and as a 'back-up to bursary'. This encourages a young student's developing autonomy since she knows that such loans are strictly business and not a handout on the 'never-never'. Ironically, again, a universal loans system might encourage that listless reliance on the state that free-marketers so often rail against.

Conclusion

I have not provided yet another scheme

". . . the argument that loans are fairer than grants and should replace them, must be rejected."

for financing tertiary study. Such a scheme needs to be devised by competent people and negotiated with those most affected. I hope that I have issued some warnings and set down some principles relating to

- the necessity to query dogmatic assumptions about equity;
- the importance of encouraging young people's autonomy;
- the danger of simplistic approaches to cost saving;
- the relation between student support and wider financial policy.

At the present time it is probably necessary to hold the costs of social services within bounds and governments must have policies to do this. At the same time, it is socially important to foster equality of access to higher education and the social goods it secures. But, these two aims are quite different and can't be achieved by the same mechanism. Free-market proponents, their gaze firmly on cutting state expenditure and promoting private enterprise, have mesmerised many liberals (including members of the government) into believing that their proposals will promote equality of access.

If this paper does nothing else (and it is unlikely to influence the Established Economic Church in New Zealand) I hope it will strengthen the resolve of liberals whose social guilt is always near the surface waiting to be capitalised on by those who care not a bit for the social ideals they give lip-service to and despise the very guilt they (rather literally) capitalise on.

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The Green Paper on higher education: remarks concerning its implications for participation, access and equity for women as staff and students

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I want to raise a number of issues which concern the implications of the Green Paper on Higher Education for the participation of women both as staff and students in the higher education system. Indeed, while the Green Paper neglects the place of TAFE in relation to general issues of access and equity, my remarks are to be viewed in the context of what the Green Paper may mean for the tertiary education system at large.

There are clearly multiple agendas operative in the Green Paper. For example, the accent on portability and transfer of credit indicates an educational reform agenda that is sensitive to participation and equity issues. If actually implemented this agenda will be a significant structural contribution to ensuring that working class people and disadvantaged groups can gain access to the most valued and rewarded higher education credentials. At the same time, the Green Paper authorises further reduction of public expenditures on the higher education sector and the simultaneous development of private forms of funding such as the commercialization of teaching activities (selling courses) and of intellectual property.

In short the Green Paper contains contradictory agendas emanating from different sections of the policy-making circles of this current corporatist Labor Government. Both the economic rationalists and the educational reformers can be heard in this document. Which voice is dominant in this policy statement, and which voice will prevail in the implementation of the policy, is already clear. In my view the economic rationalist agenda prevails over the others in this Green Paper. This agenda threatens the whole integrity and ethos of a public higher education system. In specific terms it threatens to turn the clock back with respect to making the higher education (and, tertiary education) system more accessible and equitable.

The current Hawke Government has been brilliant in inducting us all into the rhetoric of participation, equity and access. Unfortunately, by masterful modelling, it has inducted us into symbolic

"Arguably the Green Paper gives comfort to the single most dominant group in the higher education system: men."

manipulation of this rhetoric rather than into real, practically-oriented strategies of how to implement these values. Accordingly there are many in the higher education sector executive ranks who understand how important it is to intone this symbolic litany but who have done nothing or next to nothing with regard to developing real programs which make their institution more accessible and equitable.

The Green Paper, which has shaken the academic mandarinate out of a high-on-the-hill complacency, might have called this game. I do not think it has, with the possible exception of that emphasis on the portability and transfer of credit. Arguably the Green Paper gives comfort to the single most dominant group in the higher education (and tertiary) system: men.

Let me indicate why I think this argument is defensible. First, it is true that over the last fifteen years or so women have come to constitute about half of the undergraduate population in higher education institutions. Leaving for the moment their concentration in non-science and technology areas aside, it is important to emphasise that this achievement does not carry over into the recruitment of graduate students and into the staffing of higher education institutions. At my own (Flinders) University, using 1986 figures, women are 57.8 per cent of students enrolled at the Bachelor levels in the School of Social Sciences, a typically somewhat feminized pattern of social science undergraduate enrolment. In the same school, women represent 61.9 per cent of the Bachelor Honours enrolment, 53.9 per cent of the Masters enrolment, and 16.1 per cent of the Ph.D enrolment. Figures for the School of Mathematical Sciences indicate a sharp point of contrast: in 1986 women were 40.9 per cent of the Bachelor enrolment, nil per cent of the Bachelor Honours enrolment, nil per cent of the Masters enrolment and nil per cent of the Ph.D enrolment.[1]

It is possible to argue that some if insufficient movement has occured on the front of recruiting women into graduate work in areas such as social science. It is difficult to argue this case for faculty recruitment and promotion. Again, with reference to Flinders University, there are no female professors and only five per cent of the female academic staff are employed at the Associate Professor/Reader level.[2] This means that academic salaries are differentiated along gender lines, with average female earnings being $36,944 and average male earnings being $44,841 if academic staff engaged in the activities of teaching and research are considered.[3]

Of course these gender differentials reflect the weight of accumulated patterns of historical privilege and disadvantage. It can be argued however that, over the last ten to fifteen years, most higher education

institutions have done next to nothing to change or reshape these patterns. Even had they possessed the will to change these patterns it would have been difficult for them to do so given the decline in real government funding of higher education. Appendix F of the Green Paper shows that Commonwealth grants for higher education have declined from 1.36 per cent of the GDP in 1975 to .99 per cent in 1988.

"The existing tendency for women academics to earn less on average than men will intensify. This is not equal opportunity, and it is certainly not affirmative action."

From 1983 until the present the Labor Government has required that higher education institutions adopt equal opportunity policies, and the 1986 Affirmative Action legislation required them to adopt affirmative action policies. It is not surprising that a frequently heard complaint within academic executive circles has been that the government wants us to do all these things but provides no resources for us to do them. Government policy may be seen to have encouraged institutions both to adopt the rhetoric and to do very little by way of real practical change.

Public funding permits redistributive strategies and programs. Private forms of funding are antagonistic to these. My next several remarks elaborate this point.

It is the case that many women, especially those from disadvantaged backgrounds, require some form of active or passive public income support to participate in higher education. Active forms of income support comprise Austudy now and, in the past, Commonwealth Scholarships and teacher traineeships. Passive forms of income support comprise the free provision of higher education places, where the absence of fees removed one of the barriers to access for low income groups. In my current work as Chair of a S.A. Taskforce on Youth Incomes, we have turned up plenty of evidence that young women are less advantaged than young men in how private (usually parental) forms of income support work to support their participation in higher education. Colin Power's work here is relevant as is his research finding that the introduction of the Higher Education Administration Changes has virtually wiped out women with dependent children and modest incomes.[4]

In this context it is a sad irony that the shift of nurse training away from a hospital-based apprenticeship system into higher education removes what has been an important point of vocational access and income support for young women from low income families. If nursing students as all other students in higher (and tertiary) education are required to pay increased fees (i.e. fees over and above the HEAC charge), there will be a significant discouragement effect to all women from low income backgrounds and to all women whose access to parental or spouse support for their education is problematic or non-existent.

It is important that the Government not be allowed to pull the wool over our eyes on this point. If the Government should argue that the reintroduction of fees will be accompanied by means-tested bursaries, current experience of Austudy criteria of eligibility would indicate that the income test will be set much too low. In any case, income tests on parental or spouse income are highly problematic with regard to women since as Meredith Edwards has shown they do not necessarily share in that income.[5] Moreover the administration of Austudy is imbued with inflexibility and red-tapeism, problems that are likely to become much worse if Austudy is replaced by bureaucratic assessment and grants of fee relief.

To summarise this first point:- the Green Paper indicates an intent to reduce even further the public funding base of higher education. This can be only at the expense of participation, access and equity for disadvantaged, and especially women, students.

My second point concerns the implications for women academic staff of the types of commercialized academic activities that the Green Paper seeks to encourage. I should state at once that I am not opposed in a wholesale manner to the commercialization of academic activity. I am opposed to unregulated forms of such commercialization, by which I mean there is no requirement that the fruits of commercialization return to the specific academic community concerned for corporate purposes. The Green Paper would seem to oppose any such corporate regulation of academic commercialization. Since it (p. 62) views consultancies as a "method of increasing the flexibility of salaries available to academics", it is encouraging the privatisation of academic activity.

In my view the virtually unregulated entrepreneurial buccaneering that the Green Paper is encouraging will disadvantage women academic staff unless careful thought is given to how this type of activity is undertaken and rewarded, and to how its fruits are distributed within the institution. A good deal of consultancy work is predicated on patterns of availability and time use which depend on freedom from domestic and primary parenting responsibilities. Thus, access to consultancies and the moneys they generate is likely to favour men rather than women and to further the careers of the former rather than those of the latter. Moreover, since it is the non-feminine activities of engineering, science and the technologies which are the big money spinners in terms of attracting outside funds, it seems fairly clear that unregulated commercialization of academic skills and products will intensify the already existing gender stratification of academic staffing and the gender segmentation of academic labour markets.

Add to this the Green Paper's intention to allow the institutional differentiation of salaries in order to attract good people in such fields as computing and accountancy. There are no prizes for predicting what will happen. The existing tendency for women academics to earn less on average than men will intensify. This is not equal opportunity, and it is most certainly not affirmative action.

The third point concerns the implications of the Green Paper's abandonment of the notion that university academics are to give ⅓ of their time to teaching, ⅓ of their time to research, and ⅓ of their time to administration. Instead the Green Paper recommends the economy of specialisation, and states (p. 68) that "Future Commonwealth general research funding will be allocated in accordance with agreed educational profiles which will identify areas of research strength and concentration." Since women tend to be concentrated in the intensive and mass teaching areas of social sciences and humanities, and since their research relates to national priorities other than those touted in the Green Paper, it is all too likely that the plebs in this new system, the teachers, will turn out to be a highly feminized population. This will be the zone of the "Soft Arts", to use the terminology already current in executive and erstwhile CTEC circles. The abandonment of the older model of a well-rounded academic activity is also the abandonment of a collegial culture predicated on the equality of activity. Substituted for this collegial culture is a more specialised academic management. Given the emphases on commercialization and on well-funded and team-work research activities, it is clear that the new academic management will be oriented to and recruited from these rather than oriented to and recruited from the "soft arts".

Women who are currently based in CAEs or Institutes of Technology are not likely to benefit from this situation. Indeed the opposite is more likely. Not only will the end of the old binarism mean that they are deprived of hoped-for access to the old type of university prequisites and status. It is all too likely that they will be situated again on the wrong side of a new binarism.[6] These women, as do all academics currently engaged in applied research, already suffer the disadvantage of this type of research not being accorded value and recognition for purposes of promotion. The types of applied research I am referring to here concern applied social research as well as applied or action research that is part of the professional-academic activity of academics who train for example physiotherapists, speech therapists, and managers. Anyone who has done this research knows that it is as creative and intellectually demanding as any of the more regular university-type research which is expressed in academic publications rather than in government reports or in improved service-delivery. Moreover, one of the problems that many college and Institute of Technology women academics face is that their work conditions do not permit enough time to catch up on higher degree credentialism. This is likely to mean they will be ill-placed to compete with current university based staff in the new integrated system.

My fourth point concerns the interpretation of national priorities which is to be found within the Green Paper and other recent major policy documents such as *Skills for Australia*. These priorities are shaped by what is understood will make the Australian economy more competitive and more adaptive. I have no quarrel with this. My quarrel is with the nature of the conception of the Australian economy that is embodied in these documents. Assumptions and assertions are made which are not argued but which reflect instead a selective and gender-biased mythology about what counts as productive work in the age of computerised technologies. "High tech" industries are identified as the badge of progress and there is an emphasis on "science" and "technology" as the focal points of training for those industries.

In this type of selective economism there is a dangerous neglect of the following points:- 1. a post-industrial society involves standards of living which the growth of the service sector at large and of the community services sector in particular supplies; 2. this growth has meant that these have been and are growing areas of employment opportunities; 3. these sectors have export potential; 4. we live in an age of complex organisations and complex requirements of social scale which require equally complex management and communication skills; 5. current management theory has it that what we need now is skilled generalists, not specialists, namely people who may have a specific professional background but who are able to engage in trans-disciplinary, lateral and creative problem-solving activities; 6. an ability to think pragmatically and to be oriented in a genuine problem-solving way depends on a personal culture of self-determination and a wider political culture of self-determination.

Selective emphasis on "science" and "technology" — terms used in highly undifferentiated and metaphorical modes — is masculinist. A more balanced reading of economic national priorities brings women into the picture. The former is a John Wayne version of economics. This version not only hurts women's life changes but is likely to distort the Australian economy and the education and training which is linked to it.

Emphasis on selling education to the wealthy or relatively wealthy in our region is clearly driven by considerations of short-term gain. It is not a general vision of economic development for the Australian economy as a national economy. Were there such a vision there would be appreciation of the extent to which tertiary education academics are engaged in intra-public sector transfers, transfers often in kind rather than in cash. This would mean that the social work academic who agrees to do a consultancy (applied research) for the local Department of Community Welfare, and who receives in return a small fee or none at all, is understood as contributing to the economy.

The current John Wayne version of economics brings with it a superficial equal opportunity rhetoric which emphasises the importance of bringing women into the "non-traditional" areas (of science and technology). This rhetoric is empty unless it is situated in relation to a positive appreciation of where women do contribute in the main and how this contribution links up to and into the so-called non-traditional areas. There needs to be much more appreciation of how skilled and experienced women are in the management of complex organisations and modes of service delivery, especially with regard to line management, lateral-integrative activities and activities which combine on the ground knowledge and client/user contact with innovative and creative policy and programme development. If human resources are, as many of us believe, the key to good economic performance, women need to be appreciated as skilled and experienced in the management and cultivation of human resources. Such appreciation would establish more effective bridges between experienced and skilled women professionals and managers and the kinds of problem-solving activities the development of our national economy requires.

The current fetishism of the private sector and the refusal of governments to establish respect and understanding for work in the public sector must disadvantage women relative to men. Yet public sector work is as vital to the development of the economy as any other kind.

In conclusion, it is important to emphasise that I welcome the spirit of change which the Green Paper argues for the tertiary education sector. I agree entirely with one of its major premises, that universities in particular have been too complacently elitist and have not been sufficiently sensitive to issues of accountability and relevance. However I do not respect or trust much of the argument which the Green Paper pursues. Leaving other issues aside, what I have argued here is that the Green Paper's recommendations are likely to confirm and to identify the second class status of women staff within the tertiary education system. They are likely also to discourage women's participation as students. And they are likely to devalue the types of academic and professional activity with which women tend to be associated. In short the educational reformist agenda of the Green Paper is thoroughly subjugated to its economic rationalist agenda. The latter is not a genuinely rational economic agenda. Instead it is a selective, masculinist and short term political agenda which is likely to do untold damage to our tertiary education system and, in turn, to our national economy and to the polity which maintains that economic activity.

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4. See Colin Power "Participation and Equity in the Green Paper", to be published in the proceedings of the "Symposium on the Green Paper on Higher Education", co-sponsored by the Academy of Social Science and the Research School of Social Science, A.N.U., in Canberra 20-21st February, 1988. See also: C. Power, F. Robertson and M. Baker, *Access to Higher Education: Participation, Equity and Policy*, Canberra, CTEC, 1986; and ibid., *Success in Higher Education*, Canberra, CTEC, 1988.
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Rationalisation, instrumentalism and corporate managerialism: the implications for women of the Green Paper in higher education

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What are the implications for women of the Green Paper on Higher Education? Our central argument is that the thrust of the Green Paper, with only four pages out of 126 dealing with equity issues, may be easily reconciled to the rhetoric, but not the substance or implications of the policy of equity to which the Federal Government seems committed. These developments include, for example, the National Agenda for Women launched in March 1988, the CTEC *Draft National Plan of Action for Women in Tertiary Education* Dec. 1987, *the Affirmative Action Act* 1986 and *Sex Discrimination Act* 1983. The perception of education as a social equaliser elaborated in each of these documents seems in direct contradiction with many of the economic rationalist policies of the government with respect to education, health and welfare.

However, before we proceed to consider this tension, we wish to firstly confront certain myths implicit in the Green Paper regarding the efficiency and effectiveness of tertiary education, and secondly, to analyse the nature of women's 'participation' in tertiary education since 1974. The latter sections will develop the tension between the principle of equity and the dominant themes of rationalisation and instrumentalism central to the logic of economic rationalism. economic rationalism.

Participation, equity and efficiency

Since 1970, tertiary education has been under a constant state of review in the area of external studies, academic tenure and study leave, overseas student fees, arts, nurse and teacher education, continuing education, law, Australian Studies, TAFE and the *Responsiveness of Tertiary Education to the Design Needs of Australian Industry* (1987). Many of these reports have indicated the substantial contribution that higher education has made to the development of Australian society. And yet these accomplishments have been selectively ignored by the Green Paper.[1] In particular, the Hudson *Review of Efficiency and Effectiveness* (1986) indicates that higher education is both efficient and effective. In the period 1975-85 enrolments have increased in universities by 25% and in CAEs by 38.7%. At the same time, average operating grants from the Commonwealth decreased by 8% and capital grants were reduced by 88% over the period 1975-82.[2] Whether it is possible for higher education to work at even lower cost levels remains an unexamined assumption upon which the Green Paper is based. Whether intentional or not, the Dawkins Paper represents an implicit indictment of the efforts made over the past decade.

It seems remarkable that during this period of reduced expenditure and contracting services women's participation in tertiary education has in fact signifieantly increased. This increased participation has been facilitated on the one hand by the abolition of tertiary fees and the instigation of TEAS and Austudy which has benefited both males and females. But on the other hand, participation has been impeded by the withdrawal of teaching studentships, a major avenue of social mobility and financial support for females.[3] In 1987, on average, women represent 50% of enrolments in universities, CAEs and TAFE. Yet only 35% of all higher degree students and 24% of Masters students in CAEs are women.[4] Women's increased participation has been particularly significant in part-time and external studies in which they represent 70% of all additional growth[5] and amongst mature age students (over 25).[6] Furthermore, women have made inroads into non-traditional disciplines. Between 1979-86 the percentage of women in science courses has risen from 33 to 37%, in law from 31 to 43% and in medicine from 37-47%.[7]

Such numerical measures are clearly informative. The shortcomings of numerical definitions of participation are elaborated elsewhere.[8] For now, we wish to make some qualifications regarding the notion of participation and how it is 'measured'. The numerical indicators are problematic because participation should not only take into account access as many of these figures do, but also retention and success. Furthermore, it is important that we do not treat women as a homogenous group. The pattern of women's participation indicates differences related to educational and social background, class, age, field of study and type of course.

Keeping these qualifications in mind, we can identify certain trends which are evident in recent research. Women as a group, although participating in greater numbers in all forms of tertiary education since 1974, have, nevertheless,

- a lower rate of retention from upper secondary schooling;[9]
- a higher deferral or rejection rate of offers for tertiary places;[10]
- a higher attrition rate in tertiary education due to financial and personal matters;[11]
- a lower retention rate onto postgraduate work;[12]
- and are underrepresented in the so-called 'masculine' disciplines (science, engineering, technology) and overrepresented in the so-called 'female' disciplines (arts, humanities, education).[13]

This pattern seems even more marked in the occupational distribution of women in tertiary education. Women have negligible representation in the upper echelons of tertiary teaching, research and administration. Only 3% of all professors in Australian universities are women, 2% in engineering and 1% in economics and business studies. In 1986 women were 18% of full-time teaching and research positions, an increase from 16.1% in 1979, and 44% of women were below lecturer position. In the CAEs, women were 27% of total staff, and 47% below lecturer status.[14]

There are considerable and complex factors contributing to this pattern. The problem is not the inability of women to 'achieve' in academia. Women achieve equally if not better than males controlling for age, social and educational background, and course. Critical factors which influence women's choices of educational institutions, courses and vocation are the perceived degree of social approval and familial support as well as the level of satisfaction gained in their chosen field of study. Lack of support, emotional, collegial and financial, from either the family (parents and/or partner), teachers (as mentors and gatekeepers to academic networks) or the institution itself (availability of grants, allowances, scholarships) continue to cause women to defer, withdraw or not continue with studies.[15]

Whilst specific dispositional, situational and institutional factors affect the quality and outcomes of women's participation in tertiary education either as students or staff, women in general remain alienated by the overriding masculinist power relations in tertiary institutions. Both the definitions of what is regarded as valued knowledge and the management of education, with its administrative and academic hierarchy, show themselves to be saturated by masculine values. The Hudson Report (*Review of Efficiency and Effectiveness*) lists only 17 women in 239 senior management positions in Victorian post-secondary education and these are all in traditionally female disciplines such as nursing and physiotherapy.[16]

How are these low levels of participation by women to be explained? The argument often presented in the corridors of power is that women lack ambition for academic or administrative positions due to a 'fear of success' or lack of 'self-esteem'.[17] This can no longer be sustained. It is denigratory to imply that women are deficient in some way. Rather, it is necessary to question what is perceived as 'success' in education or vocation. Any sex differences in either participation or in achievement are a result perhaps of valuing different things in education (job satisfaction rather than status for example). Furthermore, the content and nature of tertiary education itself, its organisational structures and culture, may not relate to the experience, values or interests of women.[18] The issue is not whether women adjust to the masculinist models

"It seems remarkable that during this period of reduced expenditure and contracting services that women's participation in tertiary education has in fact significantly increased."

of success in education and vocation but rather whether tertiary institutions become more self-critical of their teaching and research practices and the construction of their valued knowledge forms from inclusive points of view.

This is not new to many of us. We simply make these remarks to highlight the fact that despite significant improvements in the statistical rates of participation, factors affecting the scope, quality and outcomes of this participation are deeply embedded in the structure and culture of tertiary education. The opportunities for women remain limited in a largely male-dominated tertiary sector. The form and content of tertiary education does not take into account women's life experiences as well as it should.

In the context of these observations let us now turn to the Green Paper itself and its implications for women. Is the Paper's approach likely to result in greater opportunities for women? In our view the answer to this question is no. Whilst we accept that a restructure of tertiary education may produce benefits for disadvantaged groups, we do not see that the Green Paper offers any creative improvement upon the current situation, but rather, that it may work to the detriment of those groups who have gained increased access since 1974.

Furthermore, the Dawkins plan is conceptually and analytically superficial. What is significantly missing is an internal coherence in terms of its underlying principles. It unthinkingly accepts a set of assumptions about the relationship between education, training and the economy which are highly questionable. The evidence presented in the Green Paper fails to convince us that the economic scenario so optimistically painted will produce the anticipated outcomes. Finally, the Green Paper fails to critically analyse its own conceptual tools such as 'labour market demand', 'industrial needs', 'corporate managerialism', 'productive culture' and, of course, that all-important 'national interest', but uses them as a crude weapon, to use a Rambo analogy, to bludgeon recalcitrant institutions into line on threat of reduced funding. We do not necessarily reject, for example, the concept of a 'productive culture', provided that what constitutes such a culture is open to national and critical debate, that such a debate is sensitive to real social issues and inclusive of all interests rather than exclusive of all but economic interests. Finally, the Green Paper is significantly deficient in addressing the social and cultural outcomes of its policy.

Our discussion will focus on universities and CAEs, as does the Green Paper, whilst recognising that the relationship between all sectors of higher education has significant impact upon women, where they are located, in which institutions and disciplines, and the relative status of institutions. It is important that TAFE, a provider of tertiary education to a largely unmet demand of widely based socio-economic groups, does not become the lesser institution in any restructure. The interests of TAFE have been well argued in the initial response of the NSW Teachers' Federation.[19]

Three themes are central to the economic rationalist argument of the Green Paper on Higher Education — rationalisation, instrumentalism and privatisation. There is a fourth — equity — and we would argue it is a marginal theme, subjugated to the Paper's overriding economic rationalism. The absence of any discussion of equity in any but the section "A Fair Chance For All" confirms one's initial impression that this particular section is merely an afterthought.

The Green Paper is rash in its assertions and freely employs the rhetoric of equity without substantive recommendations. This paper will address how the notion of equity, even at a rhetorical level, is in direct contradiction to the Dawkins plans for rationalisation of the tertiary sector and its explicit economic instrumentalism. The issue of privatisation and the overall implications of tertiary restructure for affirmative action and equity are dealt with in *Gender and the Green Paper: Privatisation and Equity* by the same authors.

Rationalisation: 'bigger is better'

Without doubt, the Dawkins plan for higher education, with its Rambo emphasis on 'bigger is better', is a document of its time. In dealing with the structural questions first, the Dawkins plan defines efficiency and effectiveness in purely institutional management terms. The equity agenda is assumed to be handled by the parallel policies we have mentioned, as though any structural rearrangement towards a unitary national system is socially and politically neutral.

The rationalisation of tertiary education with the dissolution of the institu-

tional distinction between CAEs and universities is, on the one hand, expected to provide more flexibility of student choice, increase institutional autonomy and reduce government intervention. On the other hand, this rationalisation is to facilitate the assertion of a new principle for allocation of funding on the basis of 'agreed-upon priorities for institutional activity and performance' which are congruent with national priorities. (p.5) Institutions are also expected to respond to market demand and be sensitive to regional/local needs. Thus the Green Paper sets up a series of arenas in which conflicting priorities are to be negotiated via the institutional profile — with few substantive suggestions about how they can be reconciled. Will 'national priorities', for example, gain precedence over market demand or regional needs?

Apart from the apparent tension between institutional autonomy and government interventionism which is discussed in our *Privatisation and Equity* article, the probable centralisation of resources into largely metropolitan-based institutions to produce perceived economies of scale will have a significant effect on the access to and success in tertiary education. In particular, it will hinder access to those 'target' groups who are financially disadvantaged, from rural and isolated areas, Aboriginal people, women and non-English speaking migrants, many of whom have gained increased access since 1974. Let it be said that certain aspects of this rationalisation process as outlined in the Green Paper should be applauded and would be beneficial to women. These include increasing the number of student places, the development of cross-institutional accreditation of courses, flexible timetabling, bridging courses, and increasing counselling and child care. But there are a number of aspects which would possibly impede women's access to and success in the proposed unified system.

A number of scenarios are possible, depending upon whether the restructuring takes the form of amalgamations, confederations or multi-campuses. Amalgamations would tend to produce a new binary system between younger regional institutions and older, prestigious metropolitan institutions. Multi-campus arrangements would possibly create a trinary system based on the arbitrary cut-off points for research funding, in which lower-status institutions would not be involved in research activities at all. This trend would be exacerbated if post-graduate research was restricted to the larger institutions in the misplaced belief that quality research only occurs in large institutions. Whilst the unified system may initially offer a greater diversity of courses, a diversity which, we would argue, would become increasingly skewed away from the humanities and social sciences if market forces are given free play, it would also restrict access. The reduction in the locations as well as the perceived lower status of regional or smaller institutions would reduce access to equal study and research opportunities to those students and staff who lack either geographical and occupational mobility. Mature age women in particular have benefited from the community orientation of regional colleges since they lack mobility and financial independence as they assume major responsibilities in the home. Regional equity is also an obvious loser when competing with this centralist urge towards large institutions and national priorities.

Whilst institutional autonomy may have a persuasive ring to university administrators, the effect is to deflect conflict over limited resources from the central to the institutional level by setting up internal competing claims between external and internal studies, between graduate and postgraduate courses, between full-time and part-time students, between fee-paying and non-fee-paying students. For example, the Green Paper admirably professes the wish to increase external studies on the grounds of improving access to and meeting the demand of the target groups. Yet, following the urge to rationalise and centralise, it also advocates the reduction in the number of institutions offering external studies. The effect will be for the remaining external studies providers to reduce the intake of internal students in order to be able to resource the external student increases, thus reducing their capability to meet regional demand. Again, the setting of arbitrary minimum blocks of enrolments at 500 students in a field of study will reduce the ability of external study providers to offer even the basic face-to-face contact and residential programs critical to mature age, part-time and external studies students. Who does this affect? External studies programs have provided the greatest opportunities for women over 25, many who are postgraduate and rural students.[20] Unless the issue of maintaining equity of access for such students is addressed as having equal importance to the perceived economies resulting from the rationalisation of structures, then such restructuring indicates no demonstrable improvement in social outcomes of benefits for either individuals or the community.

Thirdly, this tension between the professed concern to increase the access of particular targeted groups but to rationalise into larger, more central locations will have more subtle effects. Although there has been an increase in female participation in tertiary education, the nature of this participation differs between sectors. University students have not represented the broad socio-economic distribution of the CAE and TAFE populations. Thus, the amalgamation of universities and CAEs could have the impact, given the current shortage of tertiary places with over 6000 Victorian successful Victorian Certificate of Education (VCE) applicants unable to gain a tertiary place in 1988, of re-establishing the principle of selectivity rather than more equal access to tertiary education.[21] In the competition for both limited funds and students which the Green Paper would encourage, a hierarchy of institutions based upon size, the level of funding and the ability to establish their own selection procedures could develop. Such competition would tend to fragment rather than unify, if institutions are given freedom to determine their own curricula and selection criteria. Scarcity of places would lead to a credentialling spiral in terms of educational prerequisites, and perceptions of elitism which would lead many women and financially disadvantaged groups to either self-select out of the race or be selected out due to more conservative selection procedures.

Three specific examples illustrate how access is affected by rationalisation in this context of economic constraint. Increased competition for places generally results in more conservative selection procedures. Quantitative measures of academic achievement favour students from privileged backgrounds and encourage an emphasis on science and maths, which tend to be exclusive of female interests and experience, as selectors.[22] Because assessment determines the terms of access to tertiary education, it is a political issue which has been continually renegotiated to produce a settlement to the advantage of powerful interests. This is illustrated by the current debate over the Victorian Curriculum and Assessment Board's draft assessment document which again facilitates the privileging of external assessment and academic curriculum over teacher or student assessment of a more general curriculum. At the same time, it is little publicised that over 50% of Melbourne University entrants annually do not come through this traditional end-of-year examination pathway but via alternative selection and entrance schemes (special entrance schemes, mature age entry, TAFE T12 and STC).[23] PEP access and success studies have indicated that women, as mature age and part-time students, have benefited from the opening up of alternative means of access and have achieved a high level of success.[24] Any tightening of selection procedures

due to shortage of places, argues Anwyl et al in their 1987 study of external studies, will inevitably pit mature age students (largely women in education and humanities) against school leavers (young males entering science and technology), and lead to a shift from general to vocational studies, both of which would affect the access of women.[25] The imposition of the administrative fee in 1987 already indicated that part-time students were affected more significantly than full-time, resulting in a reduction of 10%.[26] Secondly, Anna Yeatman points out the irony in that the shift of nursing education into higher education 'removes what has been an important point of vocational access and income support for young women from low-income families'.[27] Such women will be further excluded if fees are imposed. Finally, there is shortsightedness in the inability of the Dawkins plan to recognise future need for teachers, nurses, social workers and academics across all disciplines, given the current age profile of the teacher and academic workforce. Any further reduction of teacher education, an area traditionally fraught with difficulty in terms of anticipating demand, again reduces the opportunities for women.

Corporate managerialism: the gender regime

Rationalisation therefore can have a significant impact upon the *access* of women to tertiary education. It also sets up a contradiction between the professed concern to increase *retention* and rationalise into larger institutions on the grounds that they are more efficient. The environment of large institutions alienates students, and does not encourage a caring ethos. Students, particularly women, drop out due to both lack of financial support, given that their parents are less prepared to fund their training, and also because of a sense of alienation.[28] Increased retention requires an increase in student support services, and greater sensitivity to the different pedagogical and content needs of specific groups. Yet at no time does the Green Paper relate pedagogy or curriculum to retention. Nor does it indicate any willingness to supply the additional support services which must accompany these economies of scale in order to maintain the retention of and quality of education experienced by more disadvantaged groups. Given its non-substantive definition of equity, the Paper ignores how women are discouraged from continuing their education or entering academic life by the masculinist nature of the organisational culture.[29]

Despite the consensus model of corporate management of the Hawke government, the Dawkins' approach to staffing and industrial relations is confrontationist. The approach indicates little respect for academics, which is part of a long anti-intellectual tradition in Australia, and even less concern to protect those female staff in tertiary institutions who are already disadvantaged or at risk. Redundancies which generally occur in amalgamations and rationalisation will affect mostly women trapped in less secure and marginal positions such as contract and untenured lectureships, clerical staff, casual and part-time lecturers and tutors. In 1985 women who were full-time and tenured made up only 18% of all university staff and 42% of the CAEs.[30] The TAFE experience of the implementation of corporate management in the past year illustrates the loss of personnel in strategic support services for women, EEO positions and student counselling. Both the quality of educational provision and its ability to respond to women's needs will be reduced, particularly in those areas which affect women's retention and desire to continue on to postgraduate work.

"Women have negligible representation in the upper echelons of tertiary teaching, research and administration."

In order that bigger institutions be better, the economic rationalist argument is supported by a second agenda, that of the managerial reformers.[31] The output model of the Green Paper assumes that education can be managed on the same criteria of efficiency and effectiveness as profit-making industries. In so doing, there is a dichotomy drawn between academics and administrators and a reassertion of hierarchical relationships in decision-making in tertiary education which goes against the trend towards more representative committees and democratic decision-making procedures. The implementation of 'corporate management' as advocated by the Green Paper is, we argue, merely a misnomer for a return to paternalism in university management (although many would dispute that it had ever gone). In recent years, women, junior faculty as well as general staff, had gained access to some of the decision-making bodies through virtue of their representation of specific interests in the university and not merely their formal status. Given the lack of women in formal positions in both the administrative and academic hierarchy, the implication of the Green Paper is that management will become smaller with the amalgamation of institutions and become the exclusive domain of administrators with the reduction of the academic and professional boards. This streamlined corporate management process emphasises the management skills of school heads (preferably non-elected) and restricts staff to the provision of broad parameters and approval of policy. Thus the representation of women's interests in general, and the maintenance, least of all promotion, of affirmative action principles on selection, admissions policy, curriculum and resource allocation committees is under threat. Rationalisation may be cost-efficient in the short term, but not cost effective in achieving stated goals of increasing female participation. Not only does this approach go against the government's advocacy of collaboration and industrial democracy as being an effective approach to decision-making, but, in effect, it will give further credence to the perception that institutional power is not held by women.

Alternatives and strategies

The restructuring of tertiary education must produce positive outcomes in terms of increasing access and success through participation of all sectors of the community demanding tertiary education. Any restructuring must protect the access of women through already proven alternative modes of entrance (mature age, special entrance, STC). If the Green Paper is committed to create a productive climate, it is necessary to use more qualitative selection criteria than offered in end-of-year examinations. For example, there are proposals and institutions which utilise a more holistic set of selection criteria in medicine which combines qualitative data (school reports and interviews) with examinations.[32] If the Green Paper is fully committed to improve the gender mix amongst medical practitioners, technicians and engineers, as well as in welfare, education and community services, institutions shonld be required to build into their profiles quotas to ensure access of particular groups.

Secondly, access cannot be separated from success and retention. Again, there are sufficient data to indicate the need for a financial commitment by the Commonwealth in areas they have indicated as necessary such as child care. These should be extended to include supplementary grants which are distributed in the negotiation of profiles. Those institutions which provide support and counselling services and a critical and continual evaluation of pedagogy and content of courses to make them more relevant to the needs of specific groups e.g. part-time, external studies and mature age, many of whom are women, are suitably 'rewarded'. Furthermore, there should be qualitative monitoring of retention rates of such

groups onto postgraduate work and in research. These could be considered more realistic notions of effectiveness in teaching and research than mere numerical outcomes.

Thirdly, the privileging of executive management skills over academic skills in teaching and research reduces universities to mere credentialling institutions, and counters the professed objective of the Dawkins' Paper to increase participation of various target groups. If teaching is not attributed the same value as 'bringing in external monies', women's interests and activities as teachers and as students will be devalued and ignored.

Finally, the integration of equity issues as one aspect of the educational profiles is problematic. It does not prioritise equity as an essential principle which institutional administrators have to take into account in establishing their own priorities. It is important that all management decisions be made with full consultation and participation of all affected interests in tertiary education — all levels of staff, academic and general; students and representatives of specific interests in the community. Staff reorganisation needs to be closely monitored to protect those at risk such as clerical staff. It must be negotiated openly with due recourse to appeal procedures. The possible effect of a rationalisation of courses or locations must be assessed and endorsed through democratic process if the notion of regional responsiveness is to have meaning.

Instrumentalism: the weapon of 'economic man'

A second major thrust of the paper is its blatant economic instrumentalism. There is an implicit industrial metaphor which conceptualises the education-market nexus as an input-output model to the neglect of the content and process of education. It is evident that social justice is not one of these outputs, and equity has to be justified as an instrument or means by which this valued aim can be achieved. Women have a particular function to play in this model. Equity is justified on the 'wastage principle'. That is, women offer a 'pool of wasted talent' in that they are educational achievers but their skills are 'underutilised' in the labour force. This 'wastage principle' has been readily used when women are expected to enter the workforce to assist in the national interest in time of war, or when there was a shortage of teachers, and discarded when there is a surplus. It is purely instrumental, and does not see the movement of women into all occupations to improve the 'gender mix' as being either a human right or a socially desirable end in itself.

Productivity, institutional effectiveness and individual merit: a tenuous connection?

At the institutional level, the demand for the congruence between national priorities and institutional objectives 'negotiated' in the form of educational profiles as the grounds for funding as it is currently suggested works against women's interests. Given the narrow instrumentalism of the national priorities in looking for immediate, measurable productive outcomes in non-specified fields of science and technology, it is unlikely that humanities and arts, in which women staff and students are largely concentrated, will, to use a well-known sporting term, 'get a guernsey' in such profiles. This is exacerbated by the difficulty of 'measuring' outcomes in the social sciences, arts and humanities. The dilemmas created for women when educational policy is being driven by this technological imperative in prioritising science and technology is dealt with in our paper on *Privatisation and Equity*. This paper pursues the implications of determining the effectiveness of both institutions and individuals through the quantification of outcomes.

The industrial metaphor implicit in the Dawkins approach is particularly evident in the use of performance indicators as the determinant of institutional funding. Performance indicators at their crudest are dependent upon quantifiable outcomes which may satisfy the economistic 'fetish' for product but has a narrow conceptualisation of effectiveness. For example, how do outcomes compare to the input (type and composition of applicants) and process (quality of teaching and curriculum)? Is it valid to judge institutions when specific courses may be extremely effective? Performance indicators convey little meaning about the quality or process of learning for individual students. They are reliant upon information and data which is not readily available.[33] What then are the consequences?

If institutional effectiveness or productivity is equated to the number of graduates, administrators will encourage those disciplines and courses which attract the greatest number of students and with the highest success rate. Selection criteria will prefer students who offer the least risk of attrition and failure. Thus, courses which take longer will be at risk. The greatest expansion in recent years has been of women as mature age and part-time students, generally in the arts, humanities and social sciences. These are the courses which would be seen to be uneconomic and which would thus lose financial or institutional support. Reduced recurrent funding would increase class sizes, the burden of which would be largely assumed by those female academics concentrated in the teaching ranks.

For staff, the measure of 'productivity' is even more ambiguous, and it is conceptualised in two contradictory ways — that of 'merit' and 'market' loadings. It is proposed that academics will be promoted, receive bonuses, rapid promotion or higher salaries for merit. Merit itself is a problematic notion, and it is well-established that even the traditional indicators of academic merit (citations, publications) are interpreted in a way which favours males in that it ignores the gender segmented construction of tertiary education. Traditional approaches to merit ignore the ways in which ideas about masculinity and feminity are embedded in organisational arrangements and procedures in terms of how merit is both accumulated and attributed in organisations: Whilst EEO initiatives look to develop strategies and processes that remove institutional barriers and establish processes which aim to increase the number of women in existing positions, it is necessary to go further and question the distribution of tasks amongst these jobs, the relationships of different jobs in terms of power distribution, and how rules and procedures are interpreted in practice.[34]

Recent studies of female career paths and research work at Monash and Melbourne indicate how perceptions of merit is a gendered construct. Women not only hold more of the lower positions in academic career structures, but men are more likely to be appointed on the grounds of their potential as young scholars whilst women are appointed on their proven scholarship (publications). Selection committees, usually male-dominated, are 'homosocial' in that they appoint staff in their own image. Specific criteria are weighted and interpreted towards particular masculinist views of academic merit.[35]

The market 'loading'is even more suspect in that external market demand competes with internal measures of 'merit'. The necessary staffing flexibility is to be achieved by the extending of short-term, casual and untenured employment to the suggested quota of 20% of all staff. Whilst short-term contracts are valid in replacing staff on leave and conducting courses to meet specific demand, tenure enhances efficiency and effectiveness in that it attracts well-qualified staff, provides stability for long-term planning, guarantees academic freedom, encourages free debate in decision-making, and reduces the time spent on job searching. If the Green Paper were committed to getting more women into tenured and high-level positions in tertiary education, the further erosion of teaching conditions in the form suggested above would produce the opposite result. Flexibility of staffing as suggested by the Green Paper merely legitimises the further exploitation of women already in the lower level untenured positions. Additional monetary benefits are gained only through mobility and the ability to meet market demands through consultancies, which again favours males' career paths and lifestyles.

A second repercussion of the instrumentalism of the Green Paper at the institutional level is the false dichotomy drawn between teaching and research. These are perceived as separate activities and not integral, interdependent fields in tertiary education. This division of labour in academic as well as administrative work goes against the ways in which many universities produce their most valuable research and teaching. Since research and individual publication records are to be amongst the measures of institutional effectiveness and individual merit, women are disadvantaged, not only because they do not have the ready access to the same career paths and opportunities as males in general, but also, as Margaret Powles argues, women gain satisfaction from different aspects of the educative process i.e. teaching as much as research.[36] Furthermore, the division of labour between teaching and research further reduces even the possibilities existing within academic career structures, a flexibility which has benefited women. It ignores the ever-mounting evidence that women have different career life patterns to men, requiring continuing education so that they may exit, enter and re-enter tertiary education.[37] Often women, due to child care responsibilities, take different pathways to achieve initial access into academic work e.g. via research assistantships, fellowships etc. In so doing, they are less likely to be in the position to control their own research direction, which in turn reduces their capacity to publish or establish their position in their chosen field of research. Even this form of career path for women is now under threat, given the funding arrangements for ARC grants in which Fellowships are apparently going to be tied to the specific research grant and not the individual. Women wishing to research in what many male academics and researchers regard as peripheral matters such as gender will no longer be able to carry out such research unless connected to a larger research group, thus making the contribution of women and their interests 'invisible'.

It is critical, therefore, that Affirmative Action principles be built into institutional profiles and attached to resource agreements in terms of tenure, promotion and salary awards. Institutions should be encouraged to develop forms of review which are inclusive of both teaching and research and which recognise more qualitative criteria of merit than that of funds raised through consultation.

The education-productivity link: the 'myth of the competitive market'

Finally, the Green Paper adopts a particular view of 'economic man'. It assumes that there is linear and causal relationship between higher education and both individual and national productivity, a relationship which is dubious. The objectives to encourage more women to go into science and technology are commendable but problematic.[39] The argument about the commodification and marketing of knowledge is developed in detail elsewhere. The issue here is to question the assumption that more people with higher qualifications necessarily lead to increased productivity, that higher education, and in particular training in science and technology, has benefits to women; and whether the problem is in fact the lack of skilled labour in high tech.

Firstly, any emphasis on the private sector to fund future opportunities for women is misplaced, in that historically the private sector has not funded the expansion or creation of new occupations. Women have achieved higher economic and status rewards in the public sector and the human service infrastructure both in the private and public sectors.[40] Women are therefore highly 'rational' in terms of how they judge the opportunity costs of particular career paths and in deciding not to enter non-traditional occupations. Women know and understand the labour market. This is not to suggest that the private sector is not capable of pursuing equity principles and practice, but rather that it is usually not effected without state intervention. In the current economistic times, the chances of past patterns of behaviour to change are not great. The Commonwealth must maintain its commitment to the public sector and its professed responsibility to its affirmative action policy by tying funding agreements to equity objectives in both the private and public sectors.

Secondly, it is ironic that the Green Paper ignores the research on management and labour markets which indicates that specific vocational training has less productive potential than a more general educational background. Employers look for flexibility, the ability to take an interdisciplinary, lateral approach to problems, and emphasise the ability to relate to and communicate with others. Management research has indicated that it is the human and social aspects of management, the organisational culture, and the social use and context of technology which affects productivity, not necessarily the technology itself.[41] Women can contribute and have contributed to the productive culture in terms of such flexibility and overview, interpersonal and multiskill approach.

> **"Women have much to contribute to and gain from an inclusive and broad view of productive culture."**

Thirdly, the assumption that women should be directed into science and technology because it is beneficial both nationally and individually is fraught with difficulty.[42] We do not reject the objective of encouraging women to enter 'science and technology', but suggest that it requires a more sophisticated analysis and creative approach than the simplistic instrumentalism offered in the Dawkins Plan. The human capital connection between education and earnings has never been established. Both the Australian and American experience since the 1970s suggests that value of credentials falls with the expansion of the labour market and increased levels of higher education. This is increasingly so for women. One only has to look into academic career structures to refute the notion that educational credentials have the same value for both men and women in the workplace. The Melbourne and Monash studies indicated how social and cultural capital (class, gender, ethnicity), not educational capital, ultimately determines who gets what job. Women with the same and even higher qualifications take longer to get academic positions, enter at lower levels of the salary scale, with fewer chances of rapid promotion than their male equivalents.[43] Furthermore, the Sydney Careers and Appointments Board 1986 study indicates that the mean starting wage for male graduates was 89.6% of the average weekly earnings compared to 100% in 1977. For women, the mean starting wage fell from 98.4% in 1977 to 85.7% in 1986. The wage differential between male and female graduates has increased over the time that more women have gained higher degrees.[44] The human capital model depicts the experience of upper class males, not of the majority entering employment.

Furthermore, the Green Paper inflates the actual need of the labour market in this sector. High-tech occupations account for only a small percentage of

growth in the labour market in both production and service industries. High-tech is capital- not labour-intensive, and it produces few jobs for high-level experts and specialists such as engineers, technicians or computer programmers in both the producer and service industries.[45] The gender segmentation within the science/technology field is also evident. Powerful men create, manage and plan, whilst women use the technology. Women graduates experience more and longer unemployment than males with 5.8% of female degree holders unemployed in 1986 compared to 2.7% of males.[46] Therefore, the Green Paper encourages women to enter areas of risk in terms of experiencing higher levels of unemployment, even for Ph.Ds, and greater sex differentials in terms of wages and career opportunities than in other areas of growth, e.g. community services.[47] Unless the restructuring of tertiary education is closely associated with a similar critical and sophisticated analysis of the structuring and culture of the workplace, perhaps even by social scientists, women will not and should not be seduced by the science-technology rhetoric.

In conclusion, the instrumental approach results in a narrow definition of what constitutes productivity. It denies a broader conceptualisation of a productive culture which encompasses the cultural and social aspects of human activity, and not merely the material benefits which accrue from labour. Equity has long-term social and cultural benefits which cannot be measured in short-term quantitative performance indicators. Social justice must be made a national priority in order to open up debate, not close it. Furthermore, this instrumentalism offers a narrow role of universities and their contribution to cultural life. At no time could the Green Paper be seen to perceive of universities as institutions which offer a critical or cultural analysis of the social system, for example, of the labour market, as are offered in the social sciences, education and the arts. Such instrumentalism is contrary to the view of universities as communities in which professional work is undertaken on a non-utilitarian basis.[47] This is not to support the notion of universities as being non-accountable for expenditure and the quality of education. Rather it suggests that higher education has a unique situation which cannot be likened to corporate production, and that the concept of 'national interest', if and however such a beast exists, should encompass more than a narrow economic instrumentalism of increased productivity and material welfare. Women have much to contribute to and gain from an inclusive and broad view of productive culture.

"Finally, the Green Paper adopts a particular view of 'economic man'."

Footnotes:

1. NSW Teachers' Federation, Initial Response by the Lecturers' Association of the NSW Teachers' Federation to *Higher Education: A Policy Discussion Paper*. February, 1988, p.6.
2. *Review of Efficiency and Effectiveness in Higher Education*, pp.31-2.
3. See D. Beswick, H. Schofield, and P. Boreham, The Participation of Women in Higher Education: Signs of Progress and Regression, in C.V. Baldcock and D. Goodrick, *Women's Participation in the Development Process*. Proceeedings of the Women's Studies Section, ANZAAS Conference; and Hayden, M., *Financial Assistance to Tertiary Education Students: a review of recent literature and research*. Australian Department of Education. Centre for the Study of Research in Higher Education, Melbourne, 1980.
4. See CTEC, *Draft National Plan of Action for Women in Tertiary Education*, 1987, pp.2-3. For contrasting male/female patterns of participation in CAEs and universities of ethnic minorities, see G. Burke and D. Davis (1986), 'Ethnic groups and Post-compulsory Education', in Australian Institute of Multicultural Affairs, *Migrants, Labour Markets and Training Program. Studies in the migrant youth labour force*. Melbourne. 1986.
5. See J. Anwyl, J. Powles, M. & K. Patrick, *Who Uses External Studies? Who should?* University of Melbourne. Centre for Study of Higher Education. 1987.
6. See L. West, T. Hore, E. Eaton and B. Kermond, *The Impact of Higher Education on Mature Age Students*. CTEC, Monash. 1986.
7. CTEC, *Draft, National Plan for Women*. p.4.
8. J. Kenway and J. Blackmore, Gender and the Green Paper: Privatisation and Equity. 1988.
9. G. Elsworth, et al., *From School to Tertiary Study*, ACER. Hawthorn. 1982.
10. Ibid.
11. M. Powles, *Women's Participation in Tertiary Education: A review of the Australian Research*. CTEC. p.51. 1986.
12. CTEC, *Draft of National Plan*, p.3.
13. *Review of Efficiency and Effectiveness*, 1986.
14. CTEC, *Draft of National Plan*, p.3. See also Powles (1986) and B. Cass, et al. *Why So Few? Women academics in Australian Universities*. Sydney University Press. 1983.
15. Powles, 1986. See also Elsworth (1982) on deferral and attrition.
16. *Review of Efficiency and Effectiveness* (1986), p.43; Australian Bureau of Statistics, *Tertiary Education*. 1987.
17. See S.K. Biklen and M.B. Brannigan (eds.), *Women and Educational Leadership*. Lexington Books, Toronto. 1980.
18. K. Jensen, 'Women's Work and Academic Culture: Adaptations and Confrontations', *Higher Education*. 11. 1982. p.67-83.
19. NSW Teachers' Federation, Initial Response by the Lecturers' Association of the NSW Teachers' Federation to *Higher Education: A Policy Discussion Paper*. February, 1988.
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21. *Age*, 23 March, 1988.
22. H. Bannister, *Gender and Tertiary Selection*, Research Paper No.2, PEP, 1987.
23. J. Stephens, Access without success: Participation and Equity in the Tertiary Sector. Discussion Paper. PEP, 1986.
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26. Commonwealth Tertiary Education Commission, *Higher Education Administration Charge, Monitoring Committee Report*. Canberra. 1987.
27. A. Yeatman, The Green Paper on Higher Education: Remarks concerning its implications for participation, access and equity for women as staff and students. Paper presented to The EEO Forum, Footscray Institute of Technical Education, 11 March, 1988. p.5.
28. See Powles, 1986.
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30. CTEC, *Draft, National Policy*, 1987.
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32. See G. Therborn, The selection of medical students in Victoria: A proposal, PEP Discussion Paper, 9. 1987. Also J. Anwyl, Towards a Tertiary Admissions Process, PEP Discussion Paper, 10, 1987. Also M. Batten, Alternative Year 12 Curricula, ACER, Working Paper 5, Hawthorn, 1987.
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34. C. Burton, 'Merit and gender', *Australian Journal of Social Issues*, 22(2), 1987, pp.426-35. See also B. Martin, 'Merit and power', *Australian Journal of Social Issues*, 22(2), 1987, pp.436-51.
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37. I. Elqvuist-Saltzman, 'More Women in Higher Education — a problem or a resource? A review paper, 1987, unpub.
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39. This dilemma is spelled out in detail in J. Elliot, and C. Powell, 'Young Women and Science: do we need more science?', *British Journal of Sociology of Education*, 8(3), 1987, pp.277-86.
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43. See Baldwin, 1985.
44. Marginson, S., 'A Tax on Participation', *Australian Society*, February 1988. p.31-33. See also R. Rumberger, 'The Job Market for College Graduates, 1960-90', *Journal of Higher Education*, 55(4), 1984, pp.433-54.
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46. Australian Bureau of Statistics, *Labour Statistics*, 1987.
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Gender and the Green Paper: privatisation and equity

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Introduction

In this paper we will concentrate on three matters; firstly on the various ways in which the Green Paper[1] seeks to privatise tertiary education and secondly on certain gender implications of such proposals, particularly those for women. Thirdly we wish to make a few broad suggestions about ways of avoiding some of the gender injustices which are likely to arise as a consequence of the privatisation of the tertiary sector.

Privatising the tertiary sector

The logic behind the Federal Government's privatisation proposals is quite simple: tertiary education should cost the government less and serve the economy more. The Government insists that it cannot increase spending on the tertiary sector. It is currently spending .99% of the gross domestic product on grants to higher education. This is less than it was spending in 1975 (1.36%) and its intention is to spend less still. Despite its ambition to cut tertiary sector costs and its own expenses, the Government — somewhat perversely — wants the tertiary sector to expand. Indeed, its aim is to increase the number of graduates from the current 95,000 a year to 125,000 a year in 2001, an increase of one-third. This, it says, is in order to accommodate the greater number of students remaining at school until year twelve, and to increase the pool of tertiary-trained human capital and so to better serve the economy.

So that it may fulfil its 'more for less' objectives, the Government is canvassing alternative funding sources. These include various 'user pays' schemes such as fees for undergraduates and/or postgraduates or graduate taxes, and further expansion of the full-fee overseas students' program. They also include various forms of additional state government funding and the encouragement of industry and commerce to provide financial support for research and course/program development. It seems that private funding of one sort or another is unshakeably on the agenda and the question is at whose cost and with what consequences.

As we mentioned, a second aspect of the Green Paper is the belief that tertiary education should better serve the economy. There are various ways in which it believes that this ambition may be achieved and these are simultaneously interventionist and privatising. Before discussing these, some simple premises upon which the proposals rest should be noted. The authors of the Green Paper, echoing their master's voice, have a very evident distrust of academics. The document implies that generally they are self-indulgent, inert, wasteful and unproductive. It also implies that the sins of the academy have been visited on the economy. Despite the fact that the *Review of Efficiency and Effectiveness*[2] disputed such claims, Mr Dawkins refuses to modify his anti-academic prejudice. Academics must, it seems, be coerced into proper displays of efficiency and effectiveness. Accompanying Dawkins' anti-academic mentality is a rather sad appreciation of what education is and might be. While the Green Paper gestures feebly towards the social and cultural benefits of education, it is only able to really comprehend it as an investment; for individuals an investment in a job and for the nation, an investment in a more favourable balance of trade and economic growth.

". . . The Government has cleared the way for the further development of private tertiary institutions."

Keeping in mind these two essential premises, let us now note the ways in which the Minister plans to revitalise what he regards as an ailing and failing tertiary system. He clearly believes that economic responsiveness, efficiency and effectiveness are encouraged by exposing education to market forces and principles, and consumer sovereignty, and in the following manner. Firstly, higher education course work and research programs are to be regarded as commodities which are most appropriately valued according to 'demand'. Those most in 'demand' are to be rewarded by increased government funding and 'growth'. Of course, only certain demands are considered legitimate. Those programs supposedly

with least popular appeal will be funded less and, it seems, allowed to wither away to a subsistence existence.

Secondly, the tertiary sector and industry and commerce are to align themselves more closely and without limitation. Academics are to take up more consultancies, more contract research and are to be more entrepreneurial. Industry is to become more involved in curriculum development, and in the sponsorship of research, scholarships and even staff. By these direct and indirect means, industry and commerce are to guide the tertiary sector towards economic responsiveness and responsibility. Historically, the state's educational institutions have serviced business and industry free of charge. Indeed the corporate world has thought it right and proper that public education dance to its private tune. As Davidson points out, such a situation has allowed many employers to regard employees as expendable commodities, more appropriately made redundant than retrained at company cost.[3] Although the corporate world is not renowned for its generosity to public education, financial or otherwise, over the years its financial involvement and thus its capacity for more direct influence has increased. Already, to take two examples, industry has sponsored Chairs in Accounting, Finance, Management, Chemistry and Clinical Pharmacology[4] and a number of universities and CAEs have registered consulting and research companies. In listing some current university/industry links, Millis notes that such companies encourage research, consultancies and specialist courses which will serve Australian and overseas industries and governments.[5] Certainly the Australian Vice-Chancellors' Committee's newsletter *Univation* is a testimony to the enthusiasm of the Captains of the Universities for an alliance with the Captains of Industry.

Thirdly, the government has cleared the way for the further development of private tertiary institutions. By declaring such matters a state responsibility, it has not only withdrawn from the debate but brought to an end the Federal Government's capacity to totally monitor the directions which the tertiary sector will take. Clearly Mr Dawkins believes along with the private school lobby and Don Watts (Vice Chancellor of the university annexe to Alan Boud's real estate interests on the Gold Coast) that a private sector will "set standards against which the public system must compete".[6]

While on the one hand the Green Paper's proposals are driven by a strong privatisation imperative, on the other they are equally strongly interventionist. It is clear that its authors do not entirely trust the forces of the market either. Indeed, what they are seeking to do is to shape the market while simultaneously declaring its neutrality. Those areas of knowledge which the Minister is keen to sponsor in order to bring about a skills and technology-led recovery are Science, Engineering, Business Studies and Computer Studies — what he has called elsewhere "the strategic disciplines". Also, 'applied' rather than 'pure' research is strongly preferred.

Equally the Green Paper task force does not trust the tertiary sector to respond to the market in 'appropriate' ways. It therefore uses funding as an instrument of reconstruction while transparently claiming to offer institutions greater autonomy to choose their academic goals and to develop their 'academic profiles'.

Let us elaborate, noting firstly that CTEC, that body which mediated between the tertiary sector and governments, has been abolished. With the end to the old binary system, the tertiary sector is to be individualised. All individual institutions are expected to develop institutional profiles and it is on the basis of these, and upon their size, that the government will enter directly into triennial funding 'contracts' with them. What is clear, however, is that economically defined 'national priorities' will over-determine all of this. The mechanisms which the Green Paper proposes in order that the recalcitrant tertiary sector be kept 'on task' in this regard include performance indicators, output funding, and competitive bidding. The latter involves creaming 1%, rising in 1992 to 2.5%, from the top of all institutions' funding and redistributing this money as a reward for toeing the line, i.e. for following the Federal Government's and the market's directions. Inter- and intra-institutional competition, not co-operation, is to become the order of the day.

Privatisation and equity issues

Now let us look briefly at some of the problems associated with Dawkins' privatisation imperative. There can be no doubt that this will have a significant, but not necessarily positive, impact upon the nature of the tertiary sector, upon the knowledge that it offers and produces, and upon staff and students. In our view the Government's privatisation proposals contain little to commend them and much to fear. They have implications for the quality and direction of teaching and research which the Green Paper has failed to acknowledge or to anticipate. The privatisation ethic also raises questions about balance and spread within and between institutions, about institutional democracy and public accountability. In the broadest sense it raises questions about our future national and cultural identity and the sort of society which we should seek to be.[7]

The government's user-pays, market-driven, economy-directed privatisation proposals are, without doubt, the 'thin edge of the wedge' for disempowered groups in Australian society. The market has a momentum which is both fierce and cruel. This suggests that the private sector will make increasing inroads into state-provided tertiary education, that private institutions will proliferate (particularly hybrid institutions which buy approved courses from public institutions), that the state will increasingly come to subsidise these private institutions and that the effects overall will be profoundly undemocratic. In the name of market freedom and through a pseudo-institutional autonomy, equality and fraternity will be further diminished as important guiding social and educational principles. As the history of the private school/state school interface shows only too clearly, privatising education decreases choice and access and increases economic and social inequalities. Clearly, then, it is not 'only' women who will suffer as a consequence — indeed it is not all women. Some, those who come from the 'right' schools and suburbs and who get into the 'right' faculties and institutions, will still do very nicely, thankyou very much. However, and despite all the rhetoric, those who will have their feet kicked from under them are likely to be aboriginal people, certain people from non-English speaking backgrounds and people from the working and welfare classes. It is the women from these groups who will, we suggest, be most damaged by Mr Dawkins. So, while our following comments address the implications of privatisation for women, the important ways in which gender intersects with class, race and ethnicity should not be overlooked in women's responses to the Green Paper.

It is now commonplace for commentators to observe either that the Green Paper is a schizophrenic document, contradictory to its core, or that it contains "multiple agendas".[8] There is also universal consent that the economy is the master discourse. The very fleeting reference to social and cultural matters is frequently alluded to, as is the 'afterthought', 'marginal', 'submerged' status of its proclaimed concern for equity. Fewer critics, however, have raised questions about the meaning which the Green Paper attaches to the concept 'equity' or the strategies it suggests for achieving it. Many feminists (and others) are critical of the 'access and success' definition of equity which is embodied in the Green Paper. They suggest that this is a very restricted reading of the feminist educational project, lacking as it does a strong socially

critical edge or any alternative social vision beyond a more balanced distribution of genitalia across the public sphere.[9] Nonetheless, it should be a matter of concern that, despite the Green Paper's reference to credit transfers, bridging courses, women into 'non-traditional' fields and so forth, even the 'access and success' feminist project is under threat at the moment. This does not mean, however, that we should abandon the wider vision for the narrower. Too often, when the economy is the master discourse, women are expected to — and do — decrease their expectations of the state. In our view what is required is an oppositional agenda which pays attention to 'access and success', while continuing to put forward the wider vision. Such thinking has determined the focus of the remainder of this paper. Let us now consider some implications for women of the proposed privatisation of the tertiary sector.

User-pays principle

Clearly there is much about the Green Paper's privatisation proposals which will have a negative impact upon women students and staff. Perhaps the most obvious is the 'user-pays' principle, which heralds the likely imposition of fees or graduate taxes of one sort or another, accompanied by some variations of a scholarships and loans scheme in the interests of 'the disadvantaged'. Fees for overseas students have already both whetted the appetite of tertiary administrators and given them an apprenticeship in educational marketing. Yet, as recent press reports indicate, even our Vice-Chancellors are expressing increasing opposition to fees.[10] Without wishing to get into the complexities of the fees debate we wish to make a few straightforward points. Firstly, if the Minister wishes to increase participation, then erecting a monetary barrier between the institution and the student is no way to do so, particularly as such increases are supposed to include an enlarged proportion of non-traditional users of the tertiary sector. Davidson suggests that the proposed expansion and restructuring of the tertiary sector threatens to devalue the middle-class credentials which universities dispense. Undergraduate fees, he says, will provide the middle classes with a self-protective gate-keeping mechanism.[11]

Secondly, the concept 'user' is problematic in a situation where market forces and government intervention along economic lines determine the direction of the curriculum, teaching and research. It should be noted that under the Dawkins proposal, both government and big business will have a greater capacity to 'use' the system to their own ends than

"The privatisation ethic also raises questions about balance and spread within and between institutions, about institutional democracy and public accountability."

will individual students. Similarly as the balance of curriculum, teaching and research tips further in favour of applied science, technology and business studies, the students in these areas will be better catered for as 'users' than will others.[12] In contrast with employers in business and industry in equivalent OECD countries, Australian employers spend a paltry amount on training their work force and on research and development. This state of affairs, in conjunction with the corporate world's capacity to nonetheless 'use' the education system, has led many interested parties to advocate the imposition of an industry levy accompanied by tax rebates for 'R&D' funding. While this may seem only fitting, it has the danger of privileging the rights, interests and 'voice' of the business sector above other sections of the community. A levy carries with it the implication that education should clone itself yet closer to the interests of capital. From an alternative point of view the point about 'users' applies particularly to any proposals for a graduate tax. In effect the graduate tax is a tax on educational credentials, and as we have already argued in our previous paper in this volume, the same credentials do not necessarily bring about the same rewards between the sexes.

The 'user-pays' principle lay behind the imposition of the administrative change in 1987 and studies of its effects (a drop of 6000 students, mainly women, part-time and external) show how clearly cost is a deterrent for certain groups of people.[13] Those women most likely to be denied access by fees are mature age, part-time, external, those with dependent children and those from low-income families or from families which refuse to support financially a daughter's or wife's education. In addition as we have indicated elsewhere means-tested compensatory funding via scholarships, bursaries or even such programs as Austudy often fail to take into account the unfavourable access to family funds which many women have.[14] Some believe that although the government may 'go easy' on the notion of undergraduate fees, it is highly likely that postgraduate programs, in their proposed manifold glory, will be expected to impose a fee. Again it should not be necessary to point out that if Mr Dawkins genuinely seeks to encourage women to enter graduate studies then, to say the least, it is churlish of him to close the door in their face by imposing fees. Further, the imposition of fees for postgraduate study threatens to move the zone of privilege upwards, making the purchase of postgraduate credentials a middle-class right. Certainly, fees will not encourage the flourishing research community which the Green Paper hopes for. In our view, fees of any sort should be frequently and stridently opposed and the government should continue to fund the tertiary sector from general revenue, increasing its contribution in a manner commensurate with its proposals for expansion.

Knowledge

A second set of gender-relevant inequalities which is likely to be confirmed and enhanced by Dawkins' privatisation proposals is within institutions. The government's intervention in the 'market' will mean that those fields of knowledge which are unable to meet its principles of immediate vocational applicability, relevance, marketability, economic payoff and so forth, those least amenable to 'entrepreneurial flair', will suffer serious reductions in funding and thus in educational quality. This in turn will cause further setbacks in status and drawing power. A self-fulfilling prophecy will be set in motion and the Arts, Humanities, Social Sciences and basic research in these areas will be systematically downgraded. Teacher Education and Nursing are clearly identified targets on the Dawkins hit list. The Green Paper is remarkably philistine in what it regards as really useful public knowledge.

Many commentators have pointed to the implications of the Government's instrumental approach to knowledge for the notion of a liberal education[15] and for the traditional university.[16] Amongst much, they point out that to belittle these fields of knowledge in the manner that the Government has, is to fail to recognise the contribution of these fields to our society and culture. There is, perhaps, no need for us to also point out that Dawkins' tastes and preferences in this regard are strongly gender-inflected. It is beyond contention that the fields which he favours contain large concentrations of men. Similarly, it is in those fields facing the bleakest futures that women students and staff are concentrated, albeit at the 'lower' levels of consumption and delivery. In addition, it is in these fields that feminism has made its greatest impact. Far fewer people in, say, Education

or the Arts are as comfortable with malestream thought as they once were. Certainly the same could not be said for people in, say, Business Studies or Economics or Accounting or Management or high-tech. centres.

We must proceed further, however, on the matter of gendered knowledge because in its strong push to encourage women into Maths, Science and Technology, the Green Paper moves into some currently muddy feminist waters and it is important that these be clarified, although far too briefly and superficially on this occasion. Many feminists have argued for some time that girls and women may gain greater and wider life chances (particularly with regard to paid work) through securing "access and success" in such 'male' knowledge domains as Maths, Science and Computer Technology. Considerable effort and funding has been put into research and educational programs directed towards this end. With regard to knowledge, mainstream equity documents now largely interpret gender equity to mean equal numbers of males and females in so-called 'non-traditional areas' (notably they do not also interpret it to mean equal numbers in the 'non-traditional' areas for men). We thus find the CTEC *Report for the 1988-90 Triennium* saying in bold print "in engineering, despite an increase of four percentage points, the proportion of students who are women only reached 6% in 1986, still a severe imbalance".[17] Access and balance seem to have almost become ends in themselves.

This tendency towards an uncritical and instrumental view of the male domains is worrying and many feminists are suggesting various reasons for caution. Some see this sort of equal representation approach as a strategic beginning to a feminist critique of the male domains and to the necessary push for wider ranging change. They note, for example, that Maths is as much a cultural construction as, say, sociology and that social power relations, including those of gender, are complicit in its production composition, delivery and use.[18]

A cautionary note is also sounded with regard to the ideological implications of what, in some cases, amounts to a feminist valorisation of these fields of knowledge. Too often the message comes across that it is only the "male domains" which are empowering. Those areas in which women conventionally succeed are defined as either power neutral or disempowering and are thus derided in a very sexist fashion For example the *Draft National Plan of Action for Women in Tertiary Education* had this to say: "Girls in schools need to be provided with information which guides them away from traditional occupations with shrinking employment opportunities".[19] Yet, despite claims to the contrary, most people with a specialist interest in the field of labour market analysis argue that areas of shrinking employment and skill shortage are by no means clear.[20]

The Dawkins plan for women tends to diminish our skills, experience, interests and aptitudes. This problem arises as a consequence of a very restricted and often masculinist definition of power[21] and from, again, a very restricted, often masculinist reading of labour market trends and likely future directions. As O'Donnell and others point out, there are also strong indications that the employment growth areas are in the community service industries, in 'hospitality' for example.[22] Further, as the empirical studies of Game and Pringle show, the movement of women into male domains does not necessarily ensure them high-powered jobs; gendered power relations in the labour market and the workplace see to that.[23] The problem of sexist programs for women also arises from a rather naive view of fields of knowledge. Let us clarify this point.

Aside from whatever else they are, the 'disciplines' are also what Eagleton calls "moral technologies".[24] They "consist of a particular set of techniques and practices for the instilling of specific kinds of values, disciplines, behaviour and response in human subjects".[25] For example he says the study of Literature seeks to teach people to be "sensitive, imaginative, responsive, sympathetic, creative, perceptive, reflective".[26] The additional point should be made that the 'disciplines' are also gender-inflected moral technologies and that the so-called 'soft' subjects often (although clearly not always) resonate best with dominant cultural definitions of femininity while the so-called 'hard' subjects do so with hegemonic definitions of masculinity. Within these cultural constructions **real** males are expected to reject the 'softnesses' mentioned above in favour of emotional, intellectual and social independence, certainty and control. As MacDonald notes, masculine and feminine sexual and social identities are built on a series of polarities which include the following "instrumental versus expressive skills, public versus private knowledge, discipline versus spontaneous creativity".[27]

While the moral technology view of knowledge is useful in drawing our attention to the values which certain fields of study both privilege and prefer to produce, it is usefully supplemented by an insistence that fields of knowledge, and, for that matter fields of social relations, embody both enabling and disabling components; or as Gramsci would say good and bad sense.[28] Therefore, while the subject Mathematics, for instance, may hold a key to a wide range of career options, and while it may be "a powerful tool for interpreting experience", it also may exert a narrow form of socialisation and is potentially mystificatory and intimidatory.[29] To take another case, the subject Literature is both 'soft' and sexist and we should acknowledge, as we implied earlier, that 'soft' may have very positive resonances.[30]

The values and skills most associated with female culture and female experience should not be seen as valuable only for such 'private' spheres as the family or the emotions. Although many women's and girls' learned capacities for nurturance and collectivity may have been harnessed in the process of their oppression, they should also be regarded as a source of strength for society. As Chodorow argues, in the domestic sphere, females often function to provide the morality (the Moral Mother) which may be missing from the public spheres of, say, business and government.[31] Others point to the benefits of "maternal thinking" for the public sphere, suggesting, for example, that given the threat of nuclear war and/or environmental destruction, such thinking may well be humanity's saviour.[32,33] Rich observes that the dominant "masculine culture" of the public sphere is characterised by:

> *depersonalisation, fragmentation, waste, artificial scarcity and emotional shallowness, not to mention its suicidal obsession with power and technology as ends rather than means.*[34]

In making this case, we wish to emphasise that we are not suggesting that 'maternal thinking' is a natural female essence well developed in all women, that it is exclusively a female quality, or that such thinking justifies the practices of socialisation which would restrict women to femininity and fecundity, hearth and home. Rather, our argument is that the positive values associated with nurturing are too often missing from those social, cultural and educational arenas which are dominated by men. The feminist cause is not simply concerned with women's access to these arenas. In emphasising 'maternal thinking' feminists offer a critique of such fields of social relations and suggest how society might be otherwise.

Now what does all this have to do with the Green Paper? Firstly, in esteeming certain fields of knowledge so highly, the Green Paper is also endorsing the sets of masculinist values which predominate in these fields. These are not necessarily those which make for a humane and compassionate society. Of course, to mention such terms is to go outside the framework of discussion set by the Green Paper. However, contrary to what Mr Dawkins would have us believe, this does not necessarily make them irrelevant. Nonetheless, let us step within his framework. The DEET mandarins are rather taken with the notion of a 'productive culture' and their understanding of the term is reflected strongly in the central logic of the Green Paper. Skills, technology, management, creativity and such like are narrowly defined in pragmatic, instrumental, technicist terms. Boomer (1987), Chair of the now defunct Schools' Commission, paints a more complete picture by emphasising an array of necessary personal, cultural and social attributes and the types of education and knowledge which help to produce these.[35] Similarly, it is not just self-interest which leads those in the Humanities, the Arts and Social Sciences to argue that they too can (even if they haven't always) produce students with skills appropriate to a broadly defined productive culture with its sights set on 'Australia reconstructed'. In the view of many, social critique is part of this process.[36]

In addition feminists have pointed to the sexism embodied in DEET's definitions of such terms as productive culture, skills, technology and management, arguing that these ignore and exclude what women do and what we might offer to a 'productive culture' more broadly defined. Anna Yeatman makes this point very clearly when she says:

> *There needs to be much more appreciation of how skilled and experienced women are in the management of complex organisations and modes of service delivery, especially with regard to . . . activities which combine on-the-ground knowledge and client/user contact with innovative and creative policy and programme development. If human resources are, as many of us believe, the key to good economic performance, women need to be appreciated as skilled and experienced in the management and cultivation of human resources.*[37]

The second implication for the Green Paper of what we said earlier about gender-inflected knowledge concerns the movement to encourage girls into certain 'non-traditional areas'. The endorsement of this movement by the Minister (and his support for it via bridging courses etc.) and by Hudson et al., in the *Draft National Plan For Women* is, we suggest, more a reflection of the Federal Government's enthusiasm for attracting people to these fields than for gender equity as such. There is an emerging tendency for appropriately qualified students to avoid certain science and technology subjects at the tertiary level. Males, it seems, prefer to study those subjects which pay greater dividends and so tend to combine Maths with such fields as Commerce or Economics.[38] It thus seems reasonable to suggest that women are being encouraged to enter the Science, Maths and Technology subjects precisely because many men are vacating them for more lucrative pastures. That the Dawkins/Hudson push overlaps a certain feminist agenda is, therefore, a rather happy coincidence for both parties. But let us keep in mind the experience of women like *Rosie the Riveter* during World War II. These women were encouraged by an absence of men and by national priorities into 'non-traditional areas' but after the war, when the men returned and national priorities changed, they were encouraged to do their bit for the nation by returning home and producing babies.

Of course this is only one possible outcome. In moving into non-traditional areas, as they currently exist and as they will develop according to the Dawkins plan, women will also be subject to the preferred values and behaviours of these fields. They will not just move into a male domain but also into a masculinist culture where success may well depend upon taking on board values antithetical to a feminist cause concerned about issues beyond job mobility. It is highly unlikely that women will be exposed to feminist theory or analysis once they enter the 'non-traditional' areas. Supposing large numbers of girls and women do gain access and success in these fields, and supposing that these fields do remain unreconstructed, despite a strong female presence, what are the likely long-term social consequences? More jobs and greater financial independence for women? Maybe, and let us hope so! But if we are not careful, might this also not be accompanied by certain losses, for example of the 'maternal thinking' mentioned earlier. It is possible that a new conservatism will develop amongst women — one somewhat different from that which currently leads many of us to be complicit in our own oppression. Having learned to be rational, certain, disciplined, impartial, objective, competitive, individualistic and socially mobile, we may also have unlearned those lateral and integrative capacities such as sensitivity, empathy, and spontaneous creativity which no civilised society can afford to be without and which are as important to the public sphere as they are to the so-called private.

Research

There is no doubt that industry and commerce share the Minister's hierarchical and instrumental view of knowledge and research. We have already indicated the likely effects of such preferences for the knowledge mix of institutions and thus for associated staff. In addition, women should also be alert to the likely consequences for their work conditions and directions. There are many gender injustices which are likely to emerge due to the further involvement in research and curriculum of commerce and industry. Here are but a few.

As Kerry Barlow's important work in this area shows, even now, considerable imbalance exists between fields of study in the funding of research. For example, she shows that at Macquarie University, for the year ending December 1985, Biological Science, Chemistry, Earth Science, Maths, Physics and Environmental and Urban Studies received 57.03% of research expenditure compared with the 37.46% received by the Behavioural Sciences, Education, Law, English and Linguistics, History, Philosophy and Politics and Modern Languages.[39] Under the Dawkins plan such imbalances are likely to be seriously exacerbated. In its approach to research it is clear that the government is backing away from the notion of public funding for a broad research program. It implies that the Australian Research Council should fund research more in accord with Australia's economic needs or more specifically the Government's most favoured national priorities. This has obvious implications for the ways in which institutions frame their institutional profiles with regard to "research strengths and concentrations", and the effects of this narrow instrumentalism will work their way right down to the provision of postgraduate places and scholarships, thus further inhibiting women's involvement therein. Moreover, as a consequence of the Dawkins view of efficiency and effectiveness, the indications are that BIG projects, by BIG research names, preferably from BIG institutions, will get the 'BIG BUCKS'.

Given that women are generally of junior status, that we are concentrated both in the fields of knowledge undervalued by Mr Dawkins and in the smaller and/or less prestigious institutions often with little research track record, it is clear that the opportunities for women to undertake research will be further restricted. This has evident, and very damaging, implications for women's, particularly feminists', knowledge production. Women's future achievements in this area will not only be severely curtailed but past achievements will, as likely as not, be lost. Also, given that mega-research consumes a considerable amount of academics' after-hours time and that it often requires geographic mobility, those women with primary responsibilities for children and domestic labour will, again, be disadvantaged.

As the interests of industry and commerce are even narrower and more market-driven than those of the current Federal Government and as people from such fields are not necessarily 'troubled' by public accountability, the problems mentioned above are likely to apply particularly to privately sponsored research. Corporate sponsors are generally interested in research which produces commodities and/or which has immediate applicability, and this in itself poses problems for the research community. We haven't the space to elaborate here, but such problems include matters to do with the legal rights and the social responsibilities of both parties, and embody a danger to the fair and free circulation of ideas within the academic community.[40] Further, as research projects will be developed, both with a close eye to the market, to possible corporate sponsors and according to the gender-inflected notions of merit and relevance which we have mentioned elsewhere,[41] then yet again that research which involves and most directly concerns women and serves our particular interests will most likely drop off many researchers' agendas. Certainly, despite its social contribution, the type of applied research which women do will be further denied validity and recognition[42] and under Dawkins' privatisation package this denial will be accorded government approval.

The commercialisation of research has other implications for women's working lives. The creation of a roving band of largely male academic consultants and educational entrepreneurs will not only have unfortunate consequences for the quality of teaching offered in our institutions. The Green Paper's proposals may well also create an elite group of institutions and an elite group of academics whose primary task is research. Those institutions and staff whose primary task is teaching will be accorded lower prestige and presumably less money. It is easy to predict that teaching responsibilities are likely to fall disproportionately on women who, with little access to and time for research, will lack the required qualifications for promotion. Also, the proposition that academics spend more and more time servicing the corporate sector, while passing their teaching on to short-term appointees, will further confirm the reserve army status and conditions of staff on temporary appointments and will make more difficult the work of those who 'stay behind'. In both cases women are and will be over-represented. Equally, the notion that payment differentials should be developed in order to encourage people from industry to work in the tertiary sector, also promises to reinforce women's suhordinate status in the academy.

The privatisation of educational equity

We suggest that despite all its linguistic posturing the Green Paper will have the effect of privatising educational equity in the tertiary sector. Now we all know that the privatisation of welfare means unpaid jobs for the 'girls', but what does the privatisation of educational equity mean? In this instance, it means that, although the government will continue to talk as though it is interested in social justice, and although it will further hone its already finely honed equity rhetoric, it will, nonetheless, minimise both its role and capacity to effect change. Simply, there are two major ways of directing tertiary institutions to seriously concern themselves with educational equity. One is through legislation; although we are currently learning about its limitations. A second way is through funding, but particularly through tied funding or the threatened withdrawl of funding. There is no clearer evidence of the power of the federal purse over the tertiary sector than that currently provided by many of our senior administrators as, running scared, they desperately seek out amalgamations in order to meet the magic number — 8000 EFTSUs — and so to remain on, or to claim, the top of the tertiary heap.

Tertiary administrators recognise full well that the economic is the privileged discourse in the Green Paper and that matters of social justice are tangential to its thinking. They recognise, too, that educational equity is not really amongst the government's national priorities. The technocratic template which the Green Paper placed over the tertiary sector has teeth precisely because of funding incentives and disincentives and the "missions" of tertiary institutions are being framed accordingly. Presumably there is no need for us to point out what the 'missionary position' is: men on top! And what are these men going to do about equity unless they have a heavy-handed government persuading them of its necessity? That legislation was required before affirmative action and equal opportunity policies were even considered by most tertiary institutions speaks volumes. And, even despite such legislation, some tertiary institutions have still not implemented Equal Employment Opportunities (EEO) policies.[43]

Had the Government clearly and unequivocally declared educational equity a national priority and had it also declared that funds would be distributed accordingly, the swift institutional adjustments likely to have occurred as a consequence defy the imagination. But of course the government did no such thing and even the suggestion seems outrageous. Instead, what the Green Paper proposes is the softest of possible options; institutions are to take individual responsibility for equity matters and to include statements of their good intentions in their institutional profiles. Big deal!

". . . the economic is the privileged discourse in the Green Paper and matters of social justice are tangential to its thinking."

One of the many problems associated with this is that equity provisions such as child care, bridging courses and special counselling are to be left to the discretion of the institution within the context of 'output' funding. Rather than encouraging increased equity provisions, such funding is likely to encourage institutions to accept only low-risk, low-cost students. Considered from a social justice viewpoint, the increase of institutional autonomy with regard to credit transfer, selection policy and course accreditation is equally worrying.

With equity privatised in this manner, equity initiatives will, of necessity, have to come from within the institutions. However, almost as if in anticipation of this, the Green Paper proposes new "management structures" These are to be streamlined, the number of committees and their size will be reduced. "Mean and lean" is to be the new style.[44] The EEO programs designed to ensure women's representation on significant decision-making bodies will be made redundant. Junior academics, the majority of whom are women, will find themselves even more disenfranchised than they are at present. If women are unvoiced, then it is reasonably certain that gender concerns will remain unspoken by any other than EO officers, whose work will become well nigh impossible.

Predicting what our privatised institutions will do to redress such likely inequities requires only a little sense of history and no imagination. Predictably, they will do nothing, or offer us tokens, tokens and more tokens.

What is to be done?

Clearly, in the space available, we can only offer general responses to this question. Firstly, it is crucial that we recognise and refuse the ideological processes at work in the Green Paper and in the Government's discussions of tertiary education. The Green Paper proudly proclaims that it is a text of its time, the inevitable outcome of its context. It tells us that the context in which we must understand it is primarily, overwhelmingly and beyond all doubt, Australia's economic problems and particularly its balance of trade. The context is now supposedly unproblematic. In true paternalistic fashion, the Minister has sought to frame our thoughts for us and has led us (up the garden path?) without subtlety, to an equally framed set of appropriate responses. The limits of rational discourse have been established. Neither the boundaries of the problem nor those of the solution are now negotiable. To suggest that we should examine the ideological history of the Green Paper, to ask which particular sets of social interests the Green Paper is responding to, to proclaim that in its logic and its language this is a strongly gender-inflected document, or to wonder if the context and the text might not be thought differently, is to proclaim oneself unrealistic and irrational. Such topics are declared irrelevant.

"The Government must not be allowed to privatise educational equity in the manner implied in the Green Paper."

Already, of course, our expectations are repressed and we are persuaded that this is the "best that can be done in the current climate". We are given a few nice trinkets like cross-institutional credits and bridging courses and we are to go away feeling grateful. Meanwhile the minimal territories gained are about to be lost. Women (and others) who may wish to construct a more radical oppositional agenda are faced with a political Catch 22. Those refusing the Government's framework are effectively silenced, while those accepting its terms are powerfully framed by them. The *Draft National Policy on Women in Tertiary Institutions* (currently circulating) is a disturbing example of this latter problem.

If this is an accurate depiction of the political situation then we must indeed acknowledge that the Green Paper is a political masterpiece and that Mr Dawkins is a master planner. However, while largely accurate, the scenario we have drawn is incomplete because it fails to identify the Minister's 'Achilles heel'.

Had Mr Dawkins been a little less 'cocky' (excuse the gendered language), he would have been content with producing the instrumentalist, economistic, managerial, privatising, interventionist and chauvinist document which, essentially, the Green Paper is. However, being a clever Labor politician, he remembered that somewhere in Labor's recent history was a commitment to 'equity'. (Labor's less recent history included notions of the redistribution of wealth — but let's not talk about that.) He correctly noticed that some people (perhaps a species dying from neglect, but including those who can be a political nuisance) are still concerned about matters of social justice. Such people, perhaps misguidedly, expect their Labor politicians to have similar concerns and Mr Dawkins, political pragmatist that he is, clearly thought it appropriately placatory and not inconsistent to thus throw into the already heady mix of the Green Paper a little participation and equity rhetoric. "Trust me," he says, "and I will lead us into the promised land of an education and training led economic recovery" and "a fair chance for all".

In our view this is his 'Achilles heel' and we suggest that we do 'trust' him, that we take him at his word and **plunder** his social justice rhetoric for all that it's worth. The language (the promise?) is there, so let us frame him.

On the matter of gender equity it is worth reminding ourselves that the Green Paper emerged from a government which introduced sex discrimination and affirmative action legislation, a National Plan for Women and a National Policy on the Education of Girls. Through CTEC it is/was also developing policies with regard to women in the tertiary sector in the form of a *National Plan of Action for Women in Tertiary Education* and it is proposed that further down the track programs designed to bring such policies into effect will also be developed. While the Green Paper alludes to a relationship between itself and the *Draft National Plan*, this is elusive to say the least.

The Government must not be allowed to privatise educational equity in the manner implied in the Green Paper. We must insist that it retain and expand its role in broadening and improving the life chances of women (and other disempowered groups) and that it strengthen its stance against inequitable gendered power relations in education. It is essential therefore that in our responses to the Green Paper we include the following steps. Firstly, we must closely scrutinise the *Draft National Plan* and correct its deficiencies, not the least of which is its enthusiasm for the government's economistic frame of reference. Secondly, we should also insist that this new improved *National Plan* be written into the proposed White Paper such that its status is not peripheral. The only way to bring this about is to ensure that equity matters be accorded real national priority status, be a required part of institutional profiles, and most importantly a condition of resource allocation. Child care, bridging courses and the like would thus become inevitable. It would then be possible for the Government to coerce tertiary institutions to introduce such things as across-the-board equity guidelines and targets with regard to staffing, teaching load, research funding and management structures. Such targets should apply to student access and mix across the 'disciplines' and up the hierarchy (note the pun). It should further be required of institutions that they develop and maintain data bases on these matters and these should be monitored by an appropriate national body. Similarly, those unjust institutional adjustments which will arise as a consequence of privatisation should also be closely recorded, monitored and corrected. For instance, strategies should be developed for ensuring that the institutional community as a whole, rather than fortunate sectors within it, reap any benefits of private funding.

Of course these suggestions are mostly neither new nor particularly radical. Certainly the feminist intentions of such strategies are often distorted in their application. (The legitimating remark "and we must have a woman" is now familiar on university committees and boards.) Our suggestions above largely only address the 'access and success' agenda which, as we suggested earlier, although not at all unimportant, is limited in its vision. Such limitations arise, to an extent, from the way in which the research agenda on women and the tertiary sector has developed. Its dominant tendency has been to document the differences between males and females in access, field and level of study, achievement and employment position. While acknowledging the social, in seeking to explain such differences it focuses on the individual. This tendency is familiar to those who study gender and schooling, because over a decade ago such thinking provided the beginnings to an increasingly sophisticated body of scholarship which highlights the subtle gender dynamics of school education. For instance, gender-sensitive ethnographies have made visible the fine grain of institutional sexism. The research on the tertiary sector lags considerably behind that on schooling.

There is now a very evident need for the government to enhance its research base and to sponsor research which examines the gender regime operating within tertiary institutional cultures and subcultures and which explores current strategies of resistance to the feminist 'access and success' agenda. Equally, for the sake of its own survival if for no other reason, the Government must sponsor feminist research into its own thinking about national priorities and the role of tertiary institutions in both economic reconstruc-

tion and a new productive culture. The White Paper should not neglect such important matters.

Now, readers may be thinking that such suggestions are an exercise in voluntarist political fantasy. Perhaps so. But the alternative is a very deep pessimism which women and the rest of society clearly can't afford.

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A comment on higher education: a policy discussion paper

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Is the higher education sector inefficient and ineffective?

The higher education system has been subject to regular review in the last thirty years. Four major enquiries have been held: the Murray Enquiry (1957), the Martin Report (1964-65), the Williams Enquiry (1979) and the *Review of Efficiency and Effectiveness in Higher Education* (1986). In addition to these major enquiries there have been large numbers of triennial reports, and annual recommendations issued by the Commonwealth Tertiary Education Commission and its predecessors. The latter documents provided some scope for reviewing developments and trends in higher education. The higher education sector has been subject to close and continuous scrutiny. These enquiries have played an important role in assisting institutions to remain responsive to government objectives and emerging community demands, while maintaining a continuing commitment to teaching and research without being unduly influenced by passing fashions. Therefore, it can hardly be sustained that the higher education system has been a law unto itself, unresponsive to community demands and government objectives, and incapable of productive change.

This is not to argue, however, that there are not fundamental structural problems within the higher education system which require close attention. The 'binary' pattern of higher education established by the Martin Committee has become outdated. Colleges of advanced education, as well as universities, offer courses at both undergraduate and postgraduate level. Only in the area of doctoral education have universities maintained their dominant role. Staff recruited to colleges are usually of similar academic standard to those recruited to universities. The continuing denial to colleges of government-provided research funds increasingly constituted an under-utilisation of the research capacities of college academic staff. The maintenance of the binary system was not an efficient or effective use of resources across the spectrum of

"The continuing denial to colleges of government provided research funds increasingly constituted an under-utilisation of the research capacities of college academic staff."

the higher education system. The Green Paper on higher education, despite its specific deficiencies, at least attempts to come to terms with the structural difficulties posed by the maintenance of the binary system. The *Review of Efficiency and Effectiveness in Higher Education*, in contrast, mounted a last ditch attempt to defend the *status quo*.[1]

Nevertheless the *Review* recognised that the higher education sector had undergone significant change in the 1970s and early 1980s. Even on the basis of a crude and inappropriate inputs-outputs analysis, the higher education system has clearly become more 'efficient' since the mid-1970s. The *Review* noted that higher education enrolments increased by 25 per cent from 1975 to 1985. Average operating grants from the Commonwealth to institutions declined by 8 per cent and capital grants were reduced by 88 per cent in the period 1975 to 1982. Public expenditure on higher education declined as a proportion of GDP by 35 per cent from a peak of 1.73 per cent in 1974-1975 to 1.13 per cent in 1984-1985.[2] The Green Paper projects a further decline to 0.99 per cent of GDP for 1988.[3] The *Review* concluded, therefore, that there had 'been substantial improvements in the efficiency and effectiveness of higher education in the last decade'. The *Review*, nevertheless, warned that 'too often, pursuit of efficiency and effectiveness becomes a mindless exercise in cost-cutting, with all its negative implications'.[4]

Any analysis of the Green Paper, therefore, should take place within the context set out by the *Review of Efficiency and Effectiveness* . . . It is difficult to avoid the conclusion that the purpose of the Green Paper is to rationalise further a system which has already undergone considerable rationalisation. The charges of inefficiency, ineffectiveness and unresponsiveness of the higher education sector cannot be sustained. The Green Paper largely ignores the material set out in the *Review of Efficiency and Effectiveness*. Indeed it uses a false perception of the inefficiency of the higher education sector in order to reorient the sector's purposes and rationalise its operations.

A new binary system?

The Green Paper recognises that the traditional structure of the binary system cannot be maintained. It would be an error, however, to conclude that the binary system has been abolished altogether. Rather the Green Paper recasts the definition of the binary system and does not exclude institutions of sufficient size (2000 EFTSU) from access to some government-provided research funds. The definition of the 'new' binary system will depend on the size of institution and not on funding distinctions made between institutions bearing the title 'university' and those variously called colleges of advanded education, institutes of higher education or institutes of technology. It is proposed that institutions with 5000+ EFTSU, with a broad teaching profile, will enjoy some access to government funds for specified, but limited, research activity. Institutions with 8000+ EFTSU with a comprehensive profile will be funded at levels which will permit research across a significant proportion of that profile.

This seems a preferable arrangement to that which bases research funding on nomenclature of institutions. At least it provides access to all institutions above 5000 EFTSU to some research funds. Nevertheless, the implication of this proposal is that it may increase the 'market advantage' of a relatively small number of institutions, for the most part existing universities, relative to institutions in the smaller states and territories and in regional areas. These latter institutions may be locked into semi-permanent

second-rank status unable to reach, through enrolment growth or amalgamation, the required 8000 EFTSU necessary for comprehensive funding. With such arrangements large institutions such as the Universities of Sydney, New South Wales, Melbourne, Monash, Queensland, and Western Australia and Curtin University of Technology will have their already strong teaching and research positions enhanced. With some strategic amalgamations the University of Adelaide, the Queensland Institute of Technology and the University of Technology, Sydney, may also be able to make it into the 8000+ EFTSU league. Indeed there have already been moves in that direction in South Australia.[5] Other institutions that desire to achieve the 8000 EFTSU level may be forced into amalgamations which are administratively difficult and educationally inappropriate or result in amalgamated institutions which enhance the position of the larger partners at the expense of smaller institutions. Even then amalgamation of regional institutions such as the University of Newcastle and Newcastle College of Advanced Education, and the University of New England and Armidale College of Advanced Education would not produce institutions in excess of 8000 EFTSU. Institutions such as the University of Wollongong (4554 EFTSU), and James Cook University (2495 EFTSU), the products of earlier amalgamations, have little prospect of amalgamations with other institutions and thus reaching the required size for comprehensive funding.[6]

These considerations are of particular relevance to Canberra College of Advanced Education. The College seems faced with two options: amalgamation with ANU or becoming the largest unit in a federated institution involving the Institute of the Arts and the higher education sector of the Institute of TAFE. While the former option would produce an institution in excess of 8000 EFTSU, it is likely that ANU would be the dominant partner in a strong position to eliminate areas of activity in the College in direct competition with the university. On the other hand, a federated institution would have little prospect of attracting enrolments sufficient to justify comprehensive research funding.

While it may not be politically possible or even educationally desirable to resist all amalgamations, it seems clear that the proposed 5000+/8000+ EFTSU dichotomy will create difficulties for small or medium-sized institutions. A less rigid application of the proposed system will need to be guaranteed by the government. CTEC has not been, hitherto, very forthcoming about the specific criteria it has used for determining funds for individual institutions. A flexibly applied formula would need to be developed as a basis for negotiations between the Commonwealth and institutions in determining both the nature of educational profiles and funding arrangements. At least it is reasonable to expect the institutions between 5000 EFTSU and 8000 EFTSU to be funded for teaching and research purposes beyond the level arbitrarily determined for institutions smaller than 8000 EFTSU. While it may not be reasonable to expect that smaller institutions will attract the same level of research funding *per capita* as larger institutions, the arbitrary exclusion of smaller institutions from significant access to research funds would result in the perpetuation of a binary system of higher education based on size rather than nomenclature.

"While it may not be politically possible or even educationally desirable to resist all amalgamations, it seems clear that the proposed 5000+/8000 + EFTSU dichotomy will create difficulties for small or medium sized institutions."

Educational profiles

Within the difficulties outlined above it is reasonable to regard the allocation of funds on the basis of negotiated educational profiles as an improvement upon the current system where research funds are allocated on the basis of nomenclature of institutions. The Green Paper proposes that three criteria will be used to determine the 'contract' between institutions and the Commonwealth:

- the level of funding available to the institution from the Commonwealth to implement its chosen academic goals;
- the ability of the institution to meet the higher education needs of its community; and
- the institution's contribution to national priorities identified by the Commonwealth.

The Commonwealth has made it clear, however, that its 'approach to the development of educational profiles will give priority to national objectives'.[7] Depending on the level of generality of these national objectives it is likely that smaller institutions will be less well placed than larger institutions to meet these objectives. If, on the other hand, the Commonwealth's objectives tend to be specific, it is likely that valuable activities already undertaken by higher education institutions, that are not immediately or obviously relevant to those objectives, will be disadvantaged in the competition for funds. Such a situation may have significant deleterious consequences for the humanities and social sciences as well as areas of basic research in the physical sciences. While there may be an argument for some concentration of research effort, the general role of higher education institutions in producing, analysing and reproducing knowledge should not be underestimated, especially in areas with no immediate economic or social 'payoff'. Despite the Minister's assurances that humanities, social sciences and basic research will be protected, the Green Paper does not provide any mechanism for this to be achieved.

The Commonwealth has indicated that institutions will be funded at a level 'adequate to implement . . . agreed profiles, but the institution will be free to pursue other goals provided it can generate required resources from other sources.[8] It is unlikely that activities outside specified objectives will attract significant additional resources from industry, commerce or from governmental authorities whose interests are likely to be even more specific than the broad national objectives of the Commonwealth. The existing arrangements for funding universities at least guarantee that a wide range of teaching and research activities can be funded in those institutions. While it would not be effective to spread the existing research funding differential enjoyed by universities across all higher education institutions, it is clear that some funds for research purposes should be allocated to all institutions on an equitable basis. Such a method will go some way towards protecting valuable activities in existing institutions which are not of immediate relevance to national objectives.

Operating grants

The Commonwealth also proposes to substitute the existing system of block recurrent grants to institutions with an operating grant, incorporating general recurrent, equipment, minor works and special research grants allocated on the basis of agreed educational profiles. Ultimately institutions will receive, at best, only 97.5 per cent of funds of the operating grant of the previous year. The remaining 2.5 per cent of funds for operating grants will be allocated 'competitively on the basis of the institutional capacity to respond to specified Commonwealth objectives in teaching and research'.[9] As an interim measure for the 1989-1991 triennium, the operating grant will be set at 99 per cent of the previous year's grant.

Such a system will place at a disadvantage those institutions which are unable to respond comprehensively to 'specified Commonwealth objectives'. While it is reasonable for funding authorities to insist that institutions justify new academic developments, as is presently the case, it is quite another matter to set institutions against each other in competition for what the Commonwealth is pleased to call 'growth' funds. The proposal to divide institutions into 5000+ EFTSU and 8000+ EFTSU categories will ensure that institutions cannot compete on a roughly equal basis for funds beyond their annually reducing basic operating grant. Such a system has the potential for 'bleeding' smaller institutions to the ultimate advantage of larger institutions.

It is quite likely, moreover, that some institutions would suffer reductions in operating grants which would exceed 1 per cent (and ultimately 2.5 per cent) of the previous year's operating grant. The Green Paper makes it clear that institutions that 'are funded on a higher base than average will be asked to adjust by taking in more students'. Where such an adjustment is not made, 'funding reductions may need to be applied'. Presumably savings made in this manner will provide the 'reward' money for the expansion of those institutions that 'demonstrate a capacity for innovation and a willingness to respond to the challenges outlined' in the Green Paper.[10] Such a system will be likely to place institutions in cut-throat competition in a context where larger institutions will be advantaged in the first place.

There is no guarantee that the initial 1 per cent and the 2.5 per cent reductions are not the first instalments in a process where a major proportion of operating grants are allocated on a competitive basis. Such an approach would have an attraction to the so-called economic rationalists in the Opposition parties as well as in the present government. If institutions meekly accept competitive funding arrangements, then the overall stability of the higher education system may be undermined, even if some institutions gain some advantages in the short-term.

Reduced Commonwealth effort in higher education funding

In his statement to Parliament in September 1987 on the future of higher education in Australia, the Minister for Education, Training and Employment, John Dawkins, set a figure of 75,000 as the target for additional higher education places by 2000. He indicated that this would require annual expenditure of an additional $750 million by that time. On the current funding base of $2.4 billion this target growth rate is about 2 per cent per annum — below the expected annual increase in GDP. Commenting on this objective, Professor Ken McKinnon noted that

> *it should be possible to allocate the extra funds needed and still not increase the proportion of GDP allocated to higher education (although a decreased proportion of GDP allocated to higher education would have Australia even further below equivalent countries in the OECD club than Australia is at present.*[11]

Considering the reduction in expenditure on higher education as a proportion of GDP since 1974-5 from 1.73 per cent to a projected level of 0.99 per cent in 1988, this is indeed a sobering comment. The government, it seems, proposed to reach its target increases in enrolments by further reductions in spending on higher education.

The Green Paper redefines the target for expansion in terms of an increase in the annual number of graduates from 88,000 to 125,000. Depending on whether 10,000 or 20,000 will have completed higher education courses in TAFE, the additional cost in 2000, compared with 1987 costs, is estimated at 900 million or 1200 million dollars. These estimates imply a compound rate of increase of about 2.7 per cent per annum, which, although higher than 2 per cent cited above, is still less than the anticipated growth in GDP of between 3 per cent to 3.5 per cent per annum.[12]

The Minister has made it clear that the government will be unable to provide funding for additional places. Therefore, on the basis of the figures cited above it is reasonable to conclude that the Commonwealth does not propose to maintain its existing effort in the funding of higher education.

The government has, therefore, established a committee to consider options for attracting funds for higher education additional to those from Commonwealth sources. The government has charged the committee

> *to develop options and make recommendations for possible schemes of funding which could involve contributions from higher education students, graduates, their parents and employers. In developing options the committee should have regard to the social and educational consequences of the schemes under examination.*

Despite the fact that existing ALP policy opposes tuition fees, it can be expected that the Committee will examine the option of imposing tuition fees or, at least, extending the existing administration charge. Another proposal that has had some discussion is the notion of a graduate tax.[14]

If fees were reintroduced it is likely that their reimposition would inhibit, rather than enhance, increased participation rates in higher education. The imposition of a modest administration charge has already had an effect on part-time enrolments. Part-time study, particularly in the College sector, has been an important factor in increasing the participation of groups, particularly women, historically under-represented in higher education.[15] The objective of increased graduation rates does not seem to be consistent with the demand for increasing contributions to the costs of higher education from its direct beneficiaries.

The notion of a graduate tax, at least, has the merit of deferring the contribution of the user until after graduation. The key objection to the proposal, however, is that the ordinary tax system should take adequate account of higher income earners, whether additional income is attributable to higher education or comes from other sources. If there is a case to be made for a graduate tax, there is equally a case to be made for ensuring all high-income earners pay an increased share of income tax. The imposition of a specific graduate tax may, indeed, also act as a disincentive to the acquisition of higher education. Such a situation would also run counter to the objective of increased graduations. All user-pay proposals, moreover, tend to ignore, or at least underestimate, the social benefits of higher education. Such an approach also runs counter to the general social and economic objective of the government to improve education and skill levels of the general populace.

Staffing arrangements

The focus on the contributions of individuals rather than social investment is reflected in the Green Paper's proposals for changes in the salaries and working conditions of academic staff. It is not proposed to deal with these changed staffing arrangements in detail. These are matters more appropriately addressed in negotiations involving academic unions, government and employers' industrial organisations. It is worth noting, however, that individual institutions are no longer free to vary staff conditions without running the risk of a dispute being notified to the Australian Conciliation and Arbitration Commission. Moreover, it is likely that the government will seek to standardise conditions in a comprehensive federal award for academics. A general deterioration in the conditions of academics can be expected to be a matter that would, at the least, come before the Arbitration Commission.

Some comments can be made in passing on some of the specific staffing proposals in the context of other aspects of the

Green Paper. The proposal to introduce institutionalised competition for funds is compounded by proposing staff arrangements which set academic against academic in a system which already encourages individual competition rather than collective effort. The proposal for allowances to attract staff in 'market sensitive'[16] areas may have the effect of creating a two-class system of academics. Academics with high qualifications and significant records in research and teaching will, it seems, have to be satisfied with lower levels of remuneration than those academics that happen to work in areas where there is a high demand outside higher education institutions. Already many such academics are in a strong position to supplement their incomes with consultancy work. Academics fortunate enough to exploit consultancy opportunities are, it seems, to be further rewarded with salary allowances.

The notion that such allowances will enhance recruitment has not been subject to critical scrutiny. Indeed the current structure of academic salaries in both colleges and universities, with a number of salary grades and incremental steps, provides an opportunity for institutions to offer appointment at higher salary levels. In practice, however, institutions are inhibited from offering positions at higher salary levels by the restrictions which are a consequence of the general funding levels of institutions.[17]

The Commonwealth has made it clear that it will provide no additional funding to institutions to provide salary loadings for 'market-sensitive academics',[18] although there is some indication that the government would provide additional funding for the restructuring of salary scales.[19]

The restructuring of the salary scales and the imposition of hard barriers at the mid-point of the lecturer and senior lecturer grades would not release sufficient funds to finance allowances for academics in high demand areas. The salaries of academics in other areas would need to be squeezed to release funds for the allowances. The general imposition of five year probation periods would, moreover, provide little incentive for people able to command high salaries outside academia to accept academic appointments. Would not there be the implication of shorter probation periods being offered to some staff as a recruitment incentive? If such a proposal was adopted the rationale for the general imposition of longer probation periods would be undermined. Squeezing the conditions of one class of academics to provide incentives for another class of academics is hardly calculated to increase solidarity or cooperative methods of work.

Conclusion

It seems to me that it is not appropriate for higher education institutions to accept passively the proposed changes and to attempt to maximise their individual positions within the system at the possible expense of other institutions. The assumptions and the objectives of the Green Paper should be examined critically, and, where appropriate, contested. The positive features of the discussion paper such as the objective of increased participation and more effective transfer arrangements ought to be applauded. Other proposals in the Green Paper have, however, many of the characteristics of an 'ambit claim'. If they are not subject to critical examination, then the ambit claim may become, by default, an uncontested *fait accompli*. The future of higher education in Australia is too important for passive resignation. The nature and content of the final political decisions about higher education will depend on the balance of political forces. Higher education institutions have an obligation to provide some political counterweight to the government's plans. Their individual and collective future may depend on it.

Notes

1. *Review of Efficiency and Effectiveness in Higher Education*, Commonwealth Tertiary Education Commission, Canberra, 1986, pp.195-201.
2. *ibid*, p.31-32.
3. *Higher Education: A Policy Discussion Paper*, December 1987, p.124.
4. *Review* . . . p.18.
5. *Higher Education in South Australia: A discussion paper including options for restructuring*, Adelaide, December, 1987.
6. These figures are taken from *Higher Education* . . ., pp.118-121.
7. *ibid*, p.29.
8. *ibid*.
9. *ibid*, p.44.
10. *ibid*.
11. K.R. McKinnon, 'Expansion and Improvement of Higher Education', ATF/ANU Continuing Education Symposium, 3 December 1987, p.11.
12. Ken Davidson, 'University fees likely by 1989', *The Age*, 10 December 1987.
13. *Higher Education* . . ., p.87.
14. This proposal was first mooted by former Minister Susan Ryan when she spokc at the 'Private Initiatives in Higher Education' conference in May 1987.
15. *Higher Education Administration Charge, Monitoring Committee Report*, Commonwealth Tertiary Education Commission, 1987, pp.5-6.
16. *Higher Education* . . ., p.61.
17. The problem of academic salary differentials is examined in M.A. Haskell, 'Market and Merit Factors in the Determination of Academic Salaries', *Journal of Industrial Relations*, Vol.22, No.1, 1980, pp.168-180. Haskell's views are challenged by Judith Sloan, 'Market and Merit Factors in the Determination of, Academic Salaries: A Comment, *ibid*, Vol.23, No.1, 1981, pp.114-118. Haskell replied to Sloan in the article 'Market and Merit Factors in Academic: Some Additional Evidence', *ibid*, Vol.23, No.1, 1981, pp.119-121.
18. *Higher Education* . . ., p.62.
19. *ibid*, p.63.

New instrumentalism in higher education: another axe being ground

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Introduction

There is a venerable tradition, as old as Socrates, of blaming the world's ills upon edncation. The most recent trend has been to urge upon the education system the task of solving the country's economic problems. This is described as the instrumentalist view of education. This paper examines a relatively straightforward goal that was set for education over a decade ago, that of redressing the underrepresentation of women in the professions. Data are presented which show that whatever might be the merits of an instrumentalist view of education, the relationship between educational reform and social change is far less direct than the instrumentalist model assumes. Four difficulties are identified with the instrumentalist view which, we conclude, make the task of achieving economic reconstruction through the education system far more problematic than seems to be understood by the policy's proponents.

The instrumentalist view of education

There is a venerable tradition, as old as Socrates, of blaming the world's ills upon education. There is also a well-established practice, though perhaps not documented as early as classical times, of imposing upon education the burden of solving society's problems, however caused (although the clear implication is that if education had done its job properly, the problems would not have arisen in the first place). One of the most recent prominent and articulate expressions of the latter view in Australia has been the well-publicised comments of Senator Button, the Australian Minister for Industry, Technology and Commerce.

In a speech to a seminar on encouraging interaction between tertiary education institutions and industry in September 1987, Senator Button argued —

> *. . . now and in the future competitive advantage will rest with those economies which can best combine creativity and innovation, together with the required expertise and infrastructure, to produce world-beating goods and services.*
>
> *It follows that there are three very important things that tertiary education should be doing to boost Australian competitiveness. First it should be producing graduates who have acquired the breadth and depth of skills and attitudes required to meet the skill needs of industry.*
>
> *Second, it should be undertaking basic and applied research that can be used to create new products or services and improve existing ones, and to develop early experience with new technologies.*
>
> *Third, our teritary education institutions should be offering their expertise and facilities as resources to industry.*[1]

Senator Button, at least, recognises the value of general and liberal education, even if only to foster the creativity and innovation required for economic development. Immediately following the passage quoted above he says —

> *In saying this I am not advocating a totally utilitarian view of the world. The recent OECD report entitled "Universities under scrutiny" was right in saying that careerism, pre-professional and occupational programmes have put general and liberal education on the run.*
>
> *That is a totally undesirable situation. Creativity and innovation are unlikely to be nurtured in an environment where only occupational and functional knowledge and skills are valued.*[2]

These views are shared by Senator Button's colleague, the Minister for Employment, Education and Training, Mr J.S. Dawkins. In his statement to the Australian Parliament on 22 September 1987, Mr Dawkins noted that '. . . the Government has made clear its determination that our education and training system should play a central role in responding to the major economic challenges which still confront us'.[3] This led the Minister to 'direct new places into courses that will provide the skill base essential to underpin future economic growth namely, science, technology, engineering, computer science, economics/accountancy/commerce (including the tourism and hospitality area) and industrial and product design.[4]

Like Senator Button, Mr Dawkins is willing to acknowledge a role for the humanities, if only to reconcile the community to the social effects of economic adjustment —

> *We must also recognise the crucial contributions made by our economists, historians, philosophers and others in the humanities as Australian society works its way through the complex range of issues arising from the shift in our national economic circumstances.*[5]

Subsequently, of course, the Minister circulated a comprehensive policy discussion paper on higher education, *The Green Paper*, which expanded upon many of the views noted briefly above.[6] Although the authors of *The Green Paper* have rejected the description of the policy proposals as instrumentalist,[7] there can be little dispute that the requirement that the higher education system meets economic needs (amongst others)[8] is instrumentalist since it treats education as a commodity, in the sense used by Beverly.[9] This view has been roundly criticised as devaluing education, mere 'social engineering', making exaggerated claims about the social returns from education,[10] wrong in fact,[11] and even the conservative financial press has described an earlier statement of Senator Button's prescriptions as false and shallow.[12] Sometimes the instrumentalist view is described in caricature even by some of its proponents; as if, for example, unemployment could be solved by teaching job-seeking skills, or the law and order 'problem' could be solved by teaching obedience at schools.

Nonetheless, the instrumentalist view of education can be very persuasive, as Smyth argues —

> *Because of the way in which capitalist systems in general have been able to ascribe the cause of our economic ills to the personal inadequacies of individuals (illiteracy, lack of incentive, and poor work habits among students), it has not been difficult to link this with the systematic failure of schools to meet the needs of industry. The argument is such a compellingly simplistic one that it is proving almost impossible to dislodge — get students in schools to conform through more compliant forms of education, and all our economic woes will disappear.*[13]

"Sometimes the instrumentalist view is described in caricature even by some of its proponents . . ."

Of course, as Habermas has shown,[14] a full understanding of the role of educational institutions in modern industrial society is more complex than a simple contest between economic 'relevance' and academic 'impartiality'. The purpose of this paper is to present data which, we will argue, show that whatever might be the merits of an instrumentalist view of education, the relationship between educational reform and social change is far less direct that the instrumentalist model assumes. We also wish to show that measuring educational outputs is not sufficient for an evaluation of education's effectiveness in meeting society's goals.

A measurable goal: female participation

The complexity of the relationship, as we argue, between educational reform and social change makes it difficult to choose a goal whose outcome can be easily measured to test the instrumentalist thesis. It would be interesting to examine, for example, whether a change in the level, length, vocational orientation, or number of graduates of a program had any impact on the relevant industry's efficiency and profitability. Because of the limitations of existing data and the constraints of the study, we have had to examine a goal other than the goal of economic development to be served by education. The goal we have chosen to examine is that of redressing the underrepresentation of women in the professions. Education's role in meeting that goal was stated as early as 1976 by the then Prime Minister, Mr Fraser, in establishing the Committee of Inquiry into Education and Training (the Williams Committee).[15,16] If the instrumentalist view is feasible, there will be a direct and easily identifiable relationship between increasing female participation in programs of study leading towards professional registration and the proportion of women practising in the various professions.

Even as early as 1964 the Martin Committee described the low proportion of

women enrolled at universities and commented that this reflected a serious waste of talent.[17] As Table 1 shows the proportion of women enrolled in universities has steadily increased since the 1950s, and if present trends continue, it is likely that an equal participation of women in university education will be achieved shortly, if it hasn't been achieved already.

Table 1: Percentage of female enrolments in universities, 1951-1986

1951	1961	1971	1981	1986
20%	23.3%	31.5%	43.8%	46.9%

(Williams Committee, Education, training and employment, Report of the Committee of Inquiry into Education and Training, AGPS, Canberra, 1979, Vol.1, p.144; CTEC, *Selected University Statistics*, 1981, 1986)

Of course, as the Williams Committee pointed out, there has for some time been an unequal distribution in the participation of women in different programs.[18] Table 2 shows this for university programs leading towards professional registration.

Table 2: Percentage of female enrolments in university programs leading to professional registration, 1960-1986

	1960	1968	1974	1977	1982	1986
Architecture	7.1	9.0	17.4	19.5	25.3	30.9
Dentistry	8.8	6.4	16.4	20.1	26.5	32.9
Economics/ Commerce	7.3	9.4	16.8	20.6	28.6	34.7
Education	33.5	41.9	51.3	55.8	58.3	61.5
Engineering	0.1	0.7	2.0	2.3	5.5	7.5
Law	11.4	12.5	22.1	29.1	38.5	43.3
Medicine	19.4	20.7	34.7	38.7	39.7	42.0
Veterinary Science	7.4	13.9	21.6	31.9	41.0	49.1

(Williams Committee, *Education, training and employment*, Report of the Committee of Inquiry into Education and Training, AGPS, Canberra, 1979, Vol.1, p.145; CTEC *Selected University Statistics*, 1982, 1986)

It is clear, then, that although higher education still has much ground to cover in redressing gender imbalances in enrolments in the professional programs, it has responded to Government policy according to any 'performance indicator' that might be used to assess its effectiveness. Education's response has, however, been rather slow. The lag in response might be due to institutional inertia within higher education, or as the universities and colleges would prefer to argue, to the lack of capacity to implement desired changes whether that be lack of suitably qualified female applicants, lack of appropriate resources, or lack of sufficiently sophisticated selection and assessment criteria which do not have hidden gender biases.

It is interesting to note in passing that the percentage of female enrolments almost doubled in most university professional programs after the Whitlam Government took over full responsibility for higher education funding and removed tuition fees in 1974. There is no comparable data for advanced education, but what data there is suggest that there are similarities in female participation in the professional programs offered by colleges and institutes, as table 3 shows.

Table 3: Percentage of female enrolments in advanced education programs leading to professional registration, 1977-1986

	1977	1982	1986
Building/Architecture	11.6	14.4	19.2
Commerce/Business Studies	18.4	27.0	33.3
Education	69.3	67.6	68.1
Engineering/Technologies	1.3	2.4	4.0
Health Sciences	72.0	78.0	80.5

(CTEC, *Selected advanced education statistics*, AGPS, Canberra, 1977, 1982, 1986).

Whatever is the correct explanation, and it probably involves a complex interaction of several factors, the long lead time in introducing educational changes represents a serious difficulty for the instrumentalist view. Of course, the instrumentalist's response is that educational institutions should learn to change more quickly,[19] but that is hardly an adequate response if a large part of the problem is lack of capacity outside the higher education system, and in any case ignores the reality that a three-year course must take at least three years to change. Education is a long-term activity.

Female participation in the professions

Notwithstanding the delay, there is a trend towards a balanced gender participation in the programs leading towards professional registration. For those of us who believe that education is an end in itself, that is a worthwhile achievement. For the instrumentalists, however, it is necessary to show that the increased participation of women in higher education has resulted in their increased participation in the relevant professions. We therefore sought data on female participation in the professions. While the collection and analysis of data on student enrolments is now relatively straightforward, data on the professions is much more difficult to collect.

The first step in collating the statistical data was to decide the professions that would be analysed. The basis for selection was the standing of the registration authority and for the majority of professions an Act of Parliament sets down registration criteria and other guidelines. Professions with influential associations/institutes which determine strict conditions of membership were also added to our list. These included psychology (APsS), accounting (ICA/ASA), engineering (IEAust), computing (ACS) and librarianship (LAA). Although for some professions registration is not strictly necessary to practice, these were included in the survey where membership of the professional association was judged to be an effective requirement for employment and advancement in the profession. A final list of 24 professions was drawn up. This is shown in table 4.

Gathering data for Table 5 which lists each profession by male/female participation proved to be the most time-consuming but certainly the most interesting. The first reference point was the Australian Bureau of Statistics and the 1981 Census but unfortunately professions/occupations are listed in broad categories only and were of no use. We then approached each registration authority in Victoria separately. This proved to be a fascinating exercise. Some authorities expressed complete surprise when asked for the gender breakdown of their membership register as the request had never been made before. When questioned further some could supply the figures as requested, others referred to their register published in the Victorian Government Gazette (e.g. physiotherapy) or in the associations' publications (e.g. librarians), and others had absolutely no idea of female participation rates and were not interested (e.g. computing) and estimates had to be made from information obtained from other sources.

Fortunately, the majority of authorities approached were most co-operative (and curious) and supplied the information willingly. In some cases extra details such as current trends in membership were supplied. Where male/female ratios were not available, estimates were made by the registration authority for all professions but computing.

Table 4: Professions and their registering authority

Profession	Registering authority
1. Accounting	The Institute of Chartered Accountants/ Australian Society of Accountants
2. Architecture	Architects Registration Board
3. Building	Australian Institute of Building
4. Chiropody/Podiatry	Chiropodists Registration Board
5. Chiropractic/Osteopathy	Chiropractors & Osteopaths Registration Board
6. Computing	Australian Computer Society
7. Dentistry	The Dental Board
8. Dietetics	Dietitians Registration Board
9. Engineering	Institution of Engineers
10. Law	Supreme Court
11. Librarianship	The Library Association of Australia
12. Medicine	The Medical Board
13. Metallurgy	Institute of Mining & Metallurgy
14. Nursing	State Nursing Council
15. Occupational Therapy	Association of Occupational Therapists
16. Optometry	Optometrists Registration Board
17. Pharmacy	The Pharmacy Board
18. Physiotherapy	Physiotherapists Registration Board
19. Primary Teaching	Primary Teachers Registration Board
20. Psychology	Psychological Council/Australian Psychological Society
21. Radiography	Australian Institute of Radiography
22. Secondary Teaching	Secondary Teachers Registration Board
23. Surveying	Surveyors Board
24. Veterinary Science	The Veterinary Board

Lag between educational and social change

By comparing table 5 with table 2 we infer that changes in the gender composition of higher education programs have taken about 15 years to flow through to professional registration. We therefore identify a second difficulty with the instrumentalist view of education: that of the long lead time between changes in education and the resulting changes in society.

'Leakage' between qualification and practice as a professional

Of course the registers do not necessarily indicate participation in the professional workforce. As long as the burden of child rearing and family support continues to fall unevenly on women, their equivalent full-time participation in the workforce is likely to be considerably less than their listing on the registers of the professions. In nursing, for example, where 95% of nurses on the register are women, only 67% of registered nurses are currently practising, whether full-time or part-time.[20] If the instrumentalist view is persevered with, the task for education therefore extends beyond achieving a gender balance in the number of persons becoming qualified to practise in the professions, to one of compensating for the unequal participation of registered professional men and women in their occupations.

Professional status

One explanation of the unequal gender participation in professional occupations is that this is another instance of women having unequal access to privileged positions in society. The key sociological element in the definition of the professions is status, privilege, or social recognition.[21] If the educational system is an important selective process in maintaining the exclusiveness of the professions[22] it might

Table 5: Percentage of females registered with Victorian professional registration authorities, 1987

Profession	Female %	Female Number	Total (male & female)
1. Surveying	0	0	1624
2. Building	1	4	650 (AIB Vic)
3. Metallurgy	1	(estimated)	6800 (Mining & Metal)
4. Engineering	1.5	192	13000 (IEAust. Vic)
5. Accounting (Chartered)	7	276	3713 (ICA Vic)
6. Architecture	8.5	207	2429
7. Computing	10	(estimated)	3500
8. Chiropractic	12	68	548
9. Dentistry	15	309	2103
10. Law	18	1075	5946
11. Medicine	20	2197	10814
12. Optometry	20	72	357
13. Veterinary Science	21	243	1150
14. Pharmacy	40	1578	3913
15. Secondary Teaching	51	13895	27506
16. Radiography (Diag.)	53	572	1080
17. Chiropody/Podiatry	55	(estimated)	694
18. Psychology	60	983	1639
19. Primary Teaching	74	19241	25915
20. Physiotherapy	82	2306	2800
21. Librarianship	85	5350	6300 (LAA)
22. Dietetics	90	(estimated)	540
23. Occupational Therapy	94	603	642 (Assoc.Occ.Ther.)
24. Nursing	95	67319	71237

be thought that women have lowest participation rates in the most prestigious of programs, and thus of the professions. While this might be true in general terms, it is not a complete explanation of differences in gender participation between the professions.

The 24 professions in the survey have been ranked according to four indicators of status: length of pre-registration program, where the longer the program indicates the higher status; type of institution offering the pre-registration program (exclusively universities, universities and colleges, mostly colleges, etc); tertiary entrance score; and type of award (degree or diploma). The length of pre-registration program, the type of institution teaching the program, and the award for such programs as presented in Table 6 were determined by consultation with a number of references which included the Victorian Tertiary Admissions Committee (VTAC) *Guide to Courses in Colleges and Universities, 1988*, the Commonwealth Department of Education's *Directory of Higher Education Courses, 1986* and *CES Job Guide for Victoria, 1987*. Tertiary entrance scores were taken from information provided by VTAC.

Each program was given a score of from 1 to 4 according to where they were ranked on each index: the top quartile, the 2nd, 3rd or 4th, except for the tertiary entrance scores, which were scored on a 5-point scale. The scores were summed to give an overall ranking. In some cases it was not possible to separate programs, though programs in equal positions on the hierarchy are listed in order of tertiary entrance scores. The final ranking was again divided into rough quartiles: exclusive, elite, privileged and favoured (on the grounds that even the most 'lowly' of professions is advantaged over other occupations).

A number of interesting conclusions can be drawn from comparing this table with the previous table showing percentages of females on the professions' registers. Most significantly, the professions lowest in status all have relatively high female registration rates: chiropody/podiatry (55%), nursing (95%), primary teaching (74%), radiography (53%) and librarianship (85%). On the other hand, the most prestigious professions such as medicine, dentistry, veterinary science, and law have less than 21% female registration. It would appear from this analysis that in general female-dominated professions have lower status, and that the most exclusive professions are male-dominated.

Possible effect of perception of social worth

It also appears that the most prestigious professions are not the ones most inaccessible to women. The most male-dominated professions of surveying, building, metallurgy and engineering fall into a middle group in Table 6, indicating moderate status. Indeed, it seems many women chose to pursue programs and then careers in medicine, dentistry and veterinary science though many might equally have gained admission to programs and careers in surveying, building, metallurgy and engineering.

This suggests that the formal and informal barriers to admission to the professions are not the only factors determining registration in the professions. There may be other important factors than simply a screening of those who do not share the characteristics of those who currently dominate the profession.

One suggestion is that women do not choose careers in building, engineering, etc., because these professions are seen to have low social worth.[23] If this suggestion has any validity there is now a fourth difficulty confronting the instrumentalist view of education: that of the actual and perceived social value of the male-dominated professions. To give another rather blunt example, if the overwhelming majority of people under 18 believe that 'science and technology are responsible for many major problems facing mankind (sic), such as the threat of nuclear war and pollution',[24] there is going to be difficulty persuading young people to embark upon careers as nuclear scientists or chemical engineers.

Conclusion

We have described four difficulties with the instrumentalist view of higher education, using as an example the goal of redressing the underrepresentation of women in the professions. The first three difficulties reflected the technical inadequacies of the education system in meeting the goals set for it: the long lead time in introducing educational change; the lag between educational change and resulting changes in society; and the 'leakage' between educational 'products' and social outcomes (not all engineering graduates practise as engineers). The fourth difficulty is essentially ideological; how can one, short of actual compulsion, increase female participation in education and employment in areas that are currently regarded as 'irrelevant' to, if not destructive of, human values?

The example we chose was reasonably straightforward: the goal of redressing gender imbalances in the professions is widely accepted, though means of achieving it might be contentious, and outcomes are readily measured. Yet the mechanisms for achieving even this apparently simple change are complex and uncertain. Now the Government is looking to education 'to close the gap on our international competitors'[25] by improving industry, particularly manufacturing industry. This is a far more complex task, and given the difficulties in gearing the education system to achieving relatively simple changes in society, one wonders whether the difficulties confronting this policy are fully appreciated.

Table 6: Professions by indicators of status

Profession	Status
1. Veterinary Science	Exclusive
1. Medicine	
1. Dentistry	
4. Law	
5. Optometry	
6. Architecture	
7. Physiotherapy	
7. Pharmacy	
9. Dietetics	
10. Occupational Therapy	Elite
10. Building	
10. Engineering	
10. Psychology	
10. Secondary Teaching	
15. Chiropractic	Privileged
16. Surveying	
16. Metallurgy	
18. Computing	
18. Accounting	
20. Librarianship	
21. Radiography	Favoured
21. Primary Teaching	
23. Nursing	
24. Chiropody/Podiatry	

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The output of graduates and Australia's economic future: a response to the Green Paper on higher education

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Why are the changes so necessary?

If the proposals put forward in *Higher Education: a policy discussion paper circulated by The Hon. J.S. Dawkins MP, Minister for Employment, Education and Training*, December 1987, hereafter called 'the Green Paper', were to be implemented as a package,[1] it would represent the most far-reaching realignment, reorganisation, and restructuring of higher education in this country since the present system took shape in the sixties and early seventies. Such wholesale change would be acceptable if there was a clear and demonstrable need for it, if it could be shown to be justified in the national interest, and if those putting up the proposals could conclusively argue their case.

In the limited space given over to it in the Green Paper, twelve out of eighty-seven pages, they conspicuously fail to do so. They proceed largely on the basis of assertion, as if what they are dealing with are self-evident truths. Certainly their arguments are not supported by the facts. Central to the position they adopt is the education-economy relationship. The Green Paper uses a technique that has been thoroughly discredited, and in this case relies upon a comparison that demonstrates almost the opposite of what is intended. Moreover by focusing only upon presumed supply inadequacies the Paper presents an unbalanced analysis of the likely role played by higher education in Australia's economic future. This could have serious consequences.

The Green Paper is based upon the proposition that Australia's economic future critically depends upon two things happening in higher education — it must expand the output of graduates at a faster rate than it is at present, and it must switch the emphasis of its research and teaching activities towards those that will 'more effectively address Australia's pressing economic and social problems'.

The difficulty is, it would seem, that whilst what is needed is obvious to the government, and to the community at large, especially those in the business sector, those in higher education institutions and in particular the universities, either cannot or will not see it themselves, and so are either unable or unwilling to move in the directions and at the speed that is required. Instead they continue to operate in their own cosy inefficient manner, and in so doing frustrate the efforts of those whose aim it is to raise Australia's economic performance.

The situation is one that the Commonwealth Government thinks should not continue, but if the institutions cannot or will not put their own houses in order the government must do it for them. It must

shake them out of their complacency, it must force them to tow the line, compel them to gear themselves to national needs and priorities. To do this it must firstly identify the 'systemic barriers to change' in higher education, and then devise means of overcoming them.

The Green Paper identifies these impediments primarily as being the arbitrary and inflexible binary (or is it trinary?) system; excessive dependence upon Commonwealth Government funding; uneconomic size of institutions; inflexible salary and employment structures; poor mobility of students throughout the system; lack of accountability; outmoded attitudes and preoccupations. It proposes tackling these problems by *inter alia* removing the umbrella of CTEC (Commonwealth Tertiary Education Commission); abolishing the binary system of funding teaching and research activities, and the development of a 'unified' system of higher education; the use of Commonwealth Government financial carrots and sticks to force amalgamations and the reorientation of teaching and research to approved national priority areas; the introduction of greater flexibility in salary and employment structures; the promotion of greater mobility for students within the system; giving institutions access to non-Commonwealth Government funding sources.

Some of these changes are welcome in their own right, indeed some are ones people in the higher education sector have themselves been pressing for. Others are not welcome since they threaten to undermine scholarship and free enquiry — the very hallmarks of the university tradition. It is their implementation as a package that would have the most far-reaching and problematical consequences, and this makes an adequate justification for them so crucial.

What justification then do the drafters of the Green Paper provide? In chapter one 'The Nature of the Challenge' and chapter two 'The Size of the Task' their message is clear — the higher education system as presently constituted is failing to prodnce the number and type of graduates (including diplomates and certificate holders) with the education and skills industry needs to be able to compete successfully in the international economy into which Australia is becoming 'increasingly integrated'. Continued failure to do so is seen as seriously impeding efforts to restructure manufacturing and service industries to meet the challenge thrown up by rapidly changing technology and the changing patterns of world trade.

Assertions to this effect are sprinkled liberally throughout the first two chapters but nowhere is it demonstrated. Statistical comparisons of our educational performance with that of other OECD countries are made, and predictably these show that whilst we have pulled our socks up a bit over recent years we still lag behind others according to the indices selected. However, unlike another government publication, EPAC's *Council Paper No. 15: Human Capital and Productivity Growth* of February 1986,[2] that also takes up this theme, the Green Paper does not include any comparable economic performance indicators. It is probably just as well, for its drafters thereby avoid the problem, encountered by those who prepared the EPAC paper, of having to contradict their own evidence. We are left instead with the impression that those who are above us on the education performance ladder are also above us on the economic performance one, and that if only we could climb further up the former we could find ourselves magically climbing up the latter.

Drawing on education performance comparisons the Green Paper goes on, therefore, to suggest a level of graduate ontput the higher education system should set itself to achieve by the start of the next century, in order that we can considerably enhance our international standing. This figure in turn forms the basis of the discussion in chapter three 'The Implications for Education', of the sorts of changes required in participation rates, school retention rates, higher education transition rates and enrolments, and the system's own throughput rates. The conclusion reached is that given that the Commonwealth Government, for budgetary reasons, cannot (will not) increase its real allocation to meet this graduate output target, it can only be achieved through drastic changes in the productivity and 'internal efficiency' of higher education institutions, and by them gaining access to additional sources of funds. Hence the proposals put forward.

The Green Paper's justification of its proposals concentrates upon the question of the overall level of graduate output that is required. The need to change the mix of graduates by field of study is only briefly alluded to in the opening chapters — it should be towards the technical and professional areas, and away from the social sciences, humanities and education, in order to 'maintain relevance to contemporary needs'. However, one of the key proposals made in the Green Paper (in Section 5.2) is that higher education institutions be required to tailor their 'education profiles', an important element of which is their course mix, to meet national priorities and objectives. Just how and by whom these would be determined is not spelt out.

Australia's graduate requirement in the year 2001

It is important to understand the informing economic doctrine behind the justification provided in the Green Paper.

The idea that education is an important contributor to economic growth has been around at least since the time of Adam Smith, but its powerful modern version has only developed in the last thirty years with the advent of human capital theory. Its postulate that investment in people, principally through education and training, can yield high returns — for society as a whole through the enhanced productivity of its workforce, and for the individuals being invested in through entry into more rewarding jobs and higher lifetime earnings — has had enormous intuitive appeal. Efforts to calculate the returns obtainable on all sorts of education have invariably confirmed what a good buy most of them are. However the theory's policy prescriptions are only indicative/directional and provide no concrete educational targets. From an educational planner's point of view this is a serious drawback.

In operation mainly in socialist countries prior to the coming of human capital theory were manpower planning models which, whilst based on a quite different set of assumptions, also stressed the link between education and economic growth. Into the bargain they provided detailed sets of precise edncational targets. Their popularity spread worldwide in the educational boom the human capital theory was instrumental in creating.[3]

Manpower planning models are predicated on the notion that the availability of skilled labour constitutes a constraint upon economic growth, and that the more advanced and specialised the skills the more of a constraint their availability imposes. The assumption is that a given level of outpnt cannot be produced unless a minimum amount of skills of various levels and types are employed. It follows then that in order that a higher level of output can be produced by some target date in the future careful planning is needed to ensure that the additional labour with the skills required will be available. Moreover as the education and training involved in the acquisition of high level and specialised skills is long and involved so also must the planning horizon be long term.

The track record of such planning exercises is dismal. Rarely have they succeeded in meeting their objectives.[4] Reasons vary but all have two in common. One is that the long term horizon involved allows too many unforeseen factors to intervene and push the plans off target. The other, more important, one is that by their very

". . . why those responsible for the Green Paper ignored economic performance comparisons completely, and have based their whole attack on the higher education system of this country on its failure to match the performance of the US system is difficult to understand."

nature such exercises fail to allow for substitution possibilities between labour with various levels and types of skills, and between these and other inputs, in the achievement of a given output level. These have proved much more numerous than manpower planners assume, especially at the aggregate level where outputs of many different types of goods and services are involved. The upshot of this is that different countries have been able to produce more or less the same overall levels of output and enjoy comparable economic growth rates, with quite different skill mixes in their labour forces. This has rendered the forecasting of unique skill mix requirements pointless. Despite these difficulties, however, it seems that each new generation of educational planner wants to flirt with this sort of exercise.

Whilst some of the language used in the first two chapters of the Green Paper is that of human capital considerations, the whole thrust of the analysis and prescriptions is that of a classical manpower requirements educational planning exercise.

- it identifies high level skills as the constraint npon Australia's future economic competitiveness and growth;
- it adopts a medium to long term planning horizon — the target year is 2001, thirteen years away;
- it comes up with a specific educational target — 125,000 new graduates per annum by that year.
  (Even though it is stressed that this is only an 'indicative figure', and in spite of the crudeness of the means by which it is arrived at, it is still meant to be taken seriously, since it forms the basis of the deliberations in chapter three, and these in turn lead on to the proposals contained in the rest of the paper.)
- in common with many exercises of this type, it makes use of international comparative data to determine the target (or the elements that will permit the target to be set), on the assumption that by emulating the educational performance of some superior economic performer overseas we will be able to share their economic success. In this case the assumption really is only implicit since 'OECD countries that produce the highest number of graduates per 100,000 of population' are to be our exemplars. What this means in effect is the United States. Whilst it is conceded that because of 'different cultural social and economic structures' complete emulation of their graduation rates is not necessary, anything less than eighty-five per cent of them 'would do nothing to enhance over international competitiveness'.

Being so squarely planted in the manpower requirements camp it is difficult to see why the Green Paper forecast should not suffer the same fate as others of its ilk. The notion that there is a forecastable minimum graduate requirement that will make us internationally competitive by the year 2001 has little validity to begin with, and will be rendered more and more meaningless as the target year approaches.

What will we do with that many graduates?

The evidence from home and abroad that there is a clear direct link between graduate output and economic performance is far from conclusive. Certainly the Green Paper does not offer any.

Over the last two decades the educatedness of Australia's workforce has increased dramatically. From 1968-9 to 1981-2 the proportion of the full-year full-time workforce holding post secondary qualifications rose from 24.6 per cent to 48.6 per cent, whilst those with degrees increased from 3.2 per cent to 8.7 per cent.[5] Table B.1 of the Green Paper shows also that the proportion of total employment similarly qualified rose from 37.7 per cent in 1980 to 46.3 per cent in 1987 (the eqnivalent rise for degree holders was from 7.0 to 9.8 per cent). However despite this enormous enrichment of the labour force, evidence presented in the EPAC paper referred to above shows that growth rates in GDP, GDP per head and in average labour productivity remained substantially the same or, if anything, were below those achieved in earlier postwar decades.

International comparisons do not support the existence of the link either. Indeed the evidence assembled in the EPAC paper, with this purpose in mind, is unable to show any consistent relationships between educational and economic indices. The United States, the Green Paper's exemplar, is clearly a world leader on almost all the standard educational performance indices. However its economic performance over the past three decades is even poorer than our own. On the other hand Germany, who has consistently outperformed Australia in economic terms, has had graduation rates well below ours, and the proportion of their total labour force educated to first degree level about the same. Even Japan, with whom we all should be compared, but with whom comparisons are so difficult, did not perform as well as we did on one or two of EPAC's educational indices, and they consistently fell behind the U.S.

Why the drafters of the EPAC paper chose to contradict their own evidence and, even more so, why those responsible for the Green Paper ignored economic performance comparisons completely, and have based their whole attack on the higher education system of this country on its failure to match the performance of the U.S. system is difficult to understand. Apart from anything else it prevents a proper appreciation of the role of higher education in the economy, and so is apt to conceal other possible sources of our problems.

The evidence presented in the Green Paper and by EPAC are consistent with the notion that merely to increase the supply of highly educated workers will not in itself raise the level of economic performance. It may at best be regarded as a necessary but not sufficient condition for outperforming one's competitors. (In the case of Germany it has not even proved all that necessary, since so many of the qualitative aspects of its education system operate in its favour.) If insufficient jobs are available that fully exploit the general training received by graduates, and that are capable of harnessing the attributes and attitudes that they possess, then their full potential is lost, and the country's economic performance will be the poorer as a result.

This failure to maximise the use made of higher education graduates manifests itself through the spread of credentialism — the progressive upgrading of the education qualifications required even to gain a job interview, even though the job's content has not changed; the displacement of less educated by more educated workers across broad ranges of occupations; the progressive shift of the unemployment burden towards the youngest and least educated workers; the gradual squeeze of the earnings differential associated with higher education.

The Green Paper's own evidence presented in Appendix B clearly demonstrates the success those with higher education have in securing employment and how increasingly difficult it has become for those with little education to

obtain any job at all. In the face of sluggish overall employment growth the displacement effect of education is obvious. Moreover as those with higher education are forced to compete for jobs that make less and less use of the training and attributes they have acquired, so too they are obliged to accept wages and salaries lower than they otherwise might have. The resulting contraction in the earnings differential associated with higher education has been marked. For example, in 1968-69 average earnings of male degree-holders working full-year full-time were 220 per cent of the average for all males employed on that basis. By 1978-79 they had fallen to 170 per cent, and by 1980-81 to 152 per cent. For female workers employed on this basis the equivalent falls were from 196 per cent to 156 per cent then to 150 per cent.[6] This is hardly evidence of an excess demand for the services of graduates.

If Australia is to go ahead, therefore, and increase the supply of higher education graduates to the levels suggested in the Green Paper, without ensuring commensurate increases in the number of jobs available that fully utilize the training and attributes of graduates, then all that will happen is even more credentialism, increased frustration and disillusionment on the part of graduates, but little if any change in our economic performance. All very wasteful of resources.

The education sector, especially at the primary and secondary levels, is itself a major employer of graduates. Some 21 per cent of university graduates and 44 per cent of those from CAEs who entered full-year full-time employment in 1987 went into teaching.[7] It will need to take even more if the Green Paper targets are to be achieved. Self-employment, especially amongst the professions is also an area where some of the increased supply can be absorbed. However the bulk of jobs will have to come from elsewhere.

There is a marked tendency for graduates to congregate in a limited number of industries. For example 53 per cent of degree-holders and 45 per cent of all higher education graduates in employment in 1987 were located in only two industries-community services (which includes teaching, health and legal service) and public administration. Only 22 per cent of the total civilian labour force were employed in these areas. On the other hand the manufacturing sector, which employed 17 per cent of the total, only accounted for 8.5 per cent of degree-holders, and 9.4 per cent of all graduates.[8]

This points up another imbalance in the employment of graduates. The private sector employs roughly 75 per cent of the civilian labour force in this country, however of the new graduates obtaining full-year full-time employment in 1987, 43 per cent from the universities and only 30 per cent from the CAEs found it amongst private employers.[9] If the whole point of the Green Paper is to harness higher education more effectively to the country's economic performance, then clearly graduate employment opportunities must be more widespread, and must come substantially from within the private sector. Opportunities for graduates employed in the public sector to directly affect Australia's international competitiveness are necessarily limited, and with the same budgetary restrictions that have motivated some of the Green Paper's deliberations also curtailing the growth in the public sector, these opportunities are likely to be even more limited in the future.

Unfortunately the prospects of greatly expanded and more effective employment of graduates in the private business sector do not appear to be encouraging. Two critical areas of private enterprise inactivity give cause for concern. Research and development has the potential to directly contribute to Australia's future international competitiveness, especially in the rapidly expanding markets for high technology products and services. It is also itself a high intensity employer of graduates. However in 1985-86 R and D employed only 0.7 per cent of our civilian labour force, and of this only 27 per cent was employed in business enterprises.[10] A recent government report *Measures of Science and Innovation*[11] (but see also EPAC Council Paper No. 19, March 1986),[12] has ranked the R & D efforts of the Australian private sector amongst the lowest in the OECD. This is despite recent efforts by governments — through assisting in the development of venture capital markets, and by granting generous tax concessions — to stimulate it.

Industrial training, especially as it relates to highly skilled occupations and to the effective integration of graduates into production activities, is in a similarly underdeveloped state in Australia. It would seem that, like R & D, industrial training is all too often regarded as a luxury item, expenditure upon which can only really be afforded in the good times. Moreover there has been a widespread perception amongst private employers that industrial training falls much more in the province of governments than in their own backyards, to be either financed and provided through public education institutions, or subsidised if the employers themselves have to take it on. What appears to be much more thoroughly understood by businessmen in other countries — especially in Japan and Germany — is that the whole process of skill formation, especially at high levels, is a long and involved one, most of which occurs after the initial training received in higher education institutions, in conjunction with specific employment experience.[13] Skills are less readily seen as prepackaged off-the-peg items to be obtained directly from the higher education system (or to be poached from a rival), but are much more seen as requiring extensive post-education on-the-job development, if they are to be effectively employed. Recognition of this more holistic approach to skill formation, and of their own crucial role in it, has led many more employers in these countries to invest in post-education training facilities — either on their own or jointly at the industry level, and frequently with active government involvement and close cooperation from higher education institutions. This in turn gives rise to two further developments more noticeable amongst our more successful competitors. One is a much keener awareness of the uses that can be made of graduates in business — for example, the more extensive use of foreign language graduates in the development of export markets — and the other is a greater appreciation of the value to society of higher education institutions playing their traditional roles. By pursuing excellence in scholarship and learning for its own sake, rather than forever chasing 'relevance', they are providing the most solid and enduring basis upon which employers can build their own specific skill requirements.

There is no mention at all in the Green Paper of this broader context in which skill formation takes place, and as a result the possibility that the failure to develop skills that will make us internationally competitive may lie with those responsible for post-education training — the employers themselves — is not even canvassed. It is this omission that so distorts the discussion in this document of what Australia needs from its higher education system, and that leads it to come up with such a misguided set of proposals.

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Higher education — a policy discussion paper: a commentary on the Green Paper

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Introduction

It is now three decades since Eric Ashby drew our attention in his Ballard Matthews lectures to the enduring qualities of the three great social institutions of the western world — parliament, church and universities. Perhaps it has been that sense of enduring longevity which has promoted within universities, in Australia as elsewhere, a sense of comfortable well-being and laissez faire governance which has encouraged some to quietly resist or even politely ignore attempts to influence their recent affairs. Apart from the undoubted impacts of social legislation, so long as there was a bureaucratic buffer between universities and their paymaster governments, then the ancient intellectual traditions of universities seemed sufficient to guarantee an essential freedom from significant interference by the body politic.

Whether or not it was ever wholly so, that sense of immunity has been rudely shattered by the recent Green Paper. A seemingly frustrated federal government here in Australia has decided that it will follow the trails blazed by other frustrated governments elsewhere in the Commonwealth — in the United Kingdom and Canada in particular — and, even if a scorched earth policy is not its immediate objective, it certainly seems set on singeing the beards of any academics recalcitrant enough to argue that the academic world should be permitted to remain at one remove from national cares and national responsibilities.

There are some intriguing features associated with this particular Green Paper. It was launched in a number of capital cities at very well-attended meetings, organised by private interests which were not averse to making profit from their registrants. Its rhetoric was surprisingly similar — occasionally very similar — to recent statemeuts on higher education emanating from other western countries such as Canada. A large number of academics, including some not known for their immediate interest in secular affairs, actually read the Green Paper and began discussing its short- and long-term implications. Some few vice-chancellors were quick to respond to the document through newspaper columns. Most academic boards commenced the drafting of a response to the Paper, and, if those drafts I have seen are representative, the responses will commence by welcoming the federal government's conceru for the involvement in higher education. Not least, the academic community has seen fit to organise wide-ranging discussions at public meetings of the social, political and economic — as well as the educational — impacts of the proposals outlined by Mr Dawkins.

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All of this might be taken as circumstantial evidence to indicate that there is a sea-change about to occur in the realm of Australian higher education. That academics have been so quick to sense the freshening breeze suggests that the wind has had a long fetch, and that they recognise the winds of change elsewhere are about to reach what Robert Hughes has been pleased to call, on the basis of other transported policies, *The Fatal Shore.*

A unified national system

A major plank of the new policy for higher education is that TAFE, college and university sectors will be integrated under the aegis of a single policy-determining committee reporting directly to the federal Minister of Education. This committee — NBEET — has a composition which suggests two particular ministerial intentions. First, the programmed development of a closer liaison between the providers of higher education, including technical, as well as general and professional, training, on the one hand, and the employer-users of trained graduates on the other. Second, it seems clear also that the Minister intends having very close access to the advice emanating from that board; certainly it will not be subject to any substantial filter of the kind that CTEC presumably was able to provide in recent years.

Whatever irritations CTEC may have provided for many executives within higher education in the past, there has been widespread dismay at its rather inglorious and hasty demise. There is a sense that, whereas the bureaucrats within the CTEC 'understood our problems', the vast army of seemingly anonymous bureaucrats that now comprise the super Department of Employment, Education and Training will scarcely be in one place long enough to even appreciate our problems, much less provide some constructive and understanding solutions to them. That sense will not be diminished if members of the new Department suggest that educational profiles — a keystone concept in the development of the new policy for higher education — cannot

seriously be addressed within the near term for want of adequate forward planning within the new Department.

One major question concerning educational profiles is how they are to be developed by individual institutions without knowledge of equivalent planning in sister institutions. If there is to be regional rationalisation of profiles, whose task will it be to initiate and further such co-ordination? Will State higher education boards have a role to play in this connexion? If so, will the Commonwealth accept their advice? Or is this role one to be assumed by the proposed joint Commonwealth/State committees? If educational profiles are established to the satisfaction of all parties, how long will they be in place before they must be renegotiated?

It seems a pity that so central a dimension of the Government's strategy should be attended by so many questions, and that the answers to these questions cannot be gleaned readily if at all from evidence available elsewhere in the Green Paper.

Although there seems to be a wide acceptance of the notion that Australian higher education can be unified — seemingly a tertiary comprehensive system in embryo — it is not immediately apparent how such unification will be achieved in practice. Those university academics who have had some personal exposure to TAFE courses can reflect on the very different educational experiences to be enjoyed in that part of the college sector. It is a moot point whether or not a TAFE welding course provides a suitable entree to, or should be a prerequisite for, a university-level mechanical engineering course. At some stage the tertiary education community will have to decide if its sphere of responsibility can be regarded sensibly as a continuum, or rather (and I suspect, more realistically), as a somewhat inhomogeneous networking system. Such a decision must underpin any concept of readily available credit transfer between various parts of the tertiary system. The Green Paper seems to suggest transfer of credit only from the TAFE to the college and university areas, but a truly flexible arrangement would surely see such transfer operating in every possible direction throughout the entire system.

Given these caveats, it seems that the notion of 'class action' credit transfer may not be as simple in practice as the authors of the Green Paper would have us believe. This is not to say that progress is not possible; it would not be unreasonable at this stage to ask every institution to publicise its willingness to accept for advanced standing subjects or courses completed at other tertiary institutions. But I doubt if such global statements will remove the present necessity to judge cases for advanced standing very much on their individual merits. Moreover, if a national system of credit transfer is to be put in place, a natural corollary will be to see the establishment of a national scheme of academic standards. There is already some suggestion (from the AVCC) that such national standards should be established for honours degrees in the major disciplines. Many of us will certainly applaud this initiative, but its implementation will necessarily be a further charge on already scarce resources.

Growth in the higher education system

In the period since 1975 there has been an increase of 42% in student load while Commonwealth grants for the higher education sector, as a proportion of GDP, have decreased by 37%. The Commonwealth is now proposing that the system increase its number of graduates to an annual production of 125,000 — a further 33% on present figures — by the turn of the century, but without any real increase in public funding to match this gain in productivity. If we accept the suggested target figure — and this I would do not on the basis of somewhat dubious comparisons with participation rates in other selected countries, or on the simplistic assumption that more graduates means greater economic productivity, but rather because more tertiary-educated people are likely to find fulfilment in an era dominated by a revolution in information technology — then a major question to address is the size of the student resource which will be available for such education when the demographic predictors suggest a downturn in the 18-22 year-old group over the same period.

". . . public humiliation should no longer be tolerated as a suitable means of personnel management."

A key to this conundrum must be the improvement of retention rates in secondary schools together with an incentive for bright youngsters to enter tertiary courses after they have completed their secondary education. While it is widely reported that there are presently somewhere between 13,000 and 20,000 qualified students who cannot gain entry to an Australian university, the fact remains that there are well qualified young men and women who choose not to enter university, and it is not at all clear to me that we know the range of reasons underlying their decision. The 1986 CTEC *Review of Efficiency and Effectiveness in Higher Education* provides data which show that Australia leads the field in the production of graduates in education (114 per 100,000 of population compared with figures of 28 and 94 for the UK and Canada; 79, 57 and 46 respectively for the United States, Japan and West Germany). Thus the relatively large number of education graduates and the lower than required retention rates in secondary education appear not to be closely correlated. This proposition serves to emphasise a major omission in the Green Paper; because the gap between secondary and tertiary education sectors is not addressed, there is in consequence no strategy proposed by which that gap can be bridged both quickly and effectively.

All of this is to say that if we accept that growth in the higher education system is for the greater good of the Australian community at large, there are nevertheless some basic pieces of research which should be conducted sooner than later if we are to achieve the graduation targets now being set for us. And that research has nothing to do with the more immediate management concerns as to how this growth is to be funded, but rather must be concerned with improving the face and image of higher education as an experience no qualified person would wish to forego.

Teaching, scholarship and research

Following as it does on the heels of ASTEC and CTEC reports which canvassed the supposed merits of concentrated research activity, it is no surprise that the Green Paper also espouses the notion that there should be a clearer separation between teaching and research. Nor is it surprising that academics at large will resist so heterodox a view; it being universally understood as an article of faith (which does not have to be substantiated by personal and direct experience) that teaching and research are inosculate so long as one is a professed academic. What is seriously surprising, perhaps, is the lack of commentary in the Paper on the essentiality of scholarship within the university sector.

While it seems to me quite possible that, at a particular stage in their career, many academics may engage principally either in teaching or research, equally it would be a common expectation that all academics, throughout their careers, should engage in scholarship. It is my conviction that more explicit value statements relating to teaching, scholarship and research would have made more palatable the notion that some research activity which is particularly expensive to fund, may often be better served if scarce resources are concentrated for the purpose. This is not to say that individual academics cannot research, and certainly denies to no individual the ability to continue a very productive career as a scholar. It seems rather a great pity that the Green Paper in its somewhat naive and simplistic approach has helped to promulgate the notion that only some academics will be blessed and permitted to undertake research, while the rest of us are excommunicated — as unworthy or second-class pedants — from supping at the 'research' cup. If the point has been made that all of us have a responsibility to engage in first-class scholarship, quite apart from any direct involvement in cutting away at the research boundaries of disciplinary scholarship, the Paper might have done much to redress the sense of depression that is presently too pervasive among the academic fraternity in this country.

In this overall context there are a number of related matters which individual universities probably need to address. First, it seems to me that any contract between a university and its academic employees should be explicit concerning the responsibilities to be undertaken by an individual in accepting appointment. 'Undertaking duties subject to the direction of head of department' in fact too frequently begs this important issue. Too often a person is appointed and permitted or encouraged to develop a subject area which reflects a particular research involvement rather than necessarily contributing in a direct and coherent way to the planned structure or outcome of an overall course. A natural consequence of this deliberately nurtured individualism is that courses are more Topsy-like than they have good reason to be.

Second, many staff are encouraged to undertake research not because they anticipate contributing in a very significant way to their discipline, but rather because they see research publication *per se* as a means to a promotional end. In my experience it is rare to see either excellence in teaching, or excellence in scholarship, rewarded significantly for its own sake. In my judgment that is a serious commission of error on the part of university administrations, stemming from the fact that research productivity can provide relatively simple performance indicators compared with the acknowledged difficulty of assessing performance in teaching and/or scholarship. It is time we shed this defeatist attitude, and addressed an appropriate reward system for these centrally important aspects of academic performance and creativity.

Third, for the vast majority of academics who do engage in both teaching and research, the nexus between these two activities should be explored explicitly in the construction of institutional research management policies. For many academics, the ability to undertake research effectively has as much or more to do with the availability of unencumbered time as with the availability of expensive physical resources.

Fourth, with the advent of corporate and/or strategic planning within many universities, it seems not unreasonable that even curiosity-driven research should find some place in an individual's future planning. Some sense of objectives to be reached in a given time span is not incompatible with a commitment to free-ranging enquiry. If we insist on total and undirected freedom in the spending of scarce resources, we merely confirm the already widespread community view that academics are totally unaware of or unashamedly immune from worldly practicalities.

So far in this context I have been writing principally of individual and institutional concerns. One further matter

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of sectorial concern relates to the funding of research across the higher education field under the auspices of the recently established Australian Research Council. The present global budget for the Council is of the order of $70M, but the Council's chairman, Professor Don Aitkin, has publicly expressed his view that the Council's budget will expand to $200-250M over the next five years. (Note that this figure is considerably above the sum of $50M mentioned in the Green Paper as the amount that may need to be reallocated in order to achieve some acceptable level of competitive research fund allocations.) What he has not done publicly is explain where those additional funds are to come from. However, it involves little guesswork to imagine that part of the originally CTEC-identified indirect research component of general university teaching and research funding is targeted for this purpose. It is not at all clear if this likely sleight-of-hand redistribution is destined to improve the research performance of the university sector at large. What is clear is the need for universities to embed their research management policies not only very firmly within their institutional strategic plans, but also to recognise the nexus that exists between the teaching and research demands of their most productive staff members, if the likely negative impacts of this resource redistribution (e.g. fewer academic and general staff positions) are to be avoided.

Since it is widely claimed that 40% of the research completed by universities is conducted by post-graduate students, it is clearly a matter of concern that such students receive both adequate support and supervision to ensure first-class training and maintained research productivity. Some widely held concerns — the stipend level of post-graduate scholarships, access to part-time earnings, encouragement towards more mobility for example — are being addressed by the Australian Research Council, not least because the Council itself will have a substantial number of scholarships in its gift. But the Council cannot as effectively address other intramural problems experienced by post-graduate students: ineffectual supervision, want of protection of intellectual property and lack of even basic facilities are some of the quite proper bases for grievance expressed by this invaluable research resource in some spheres of Australian universities. It is wholly indefensible for university administrations to tolerate such potentially wasteful situations, and yet there is a substantial body of evidence to suggest that many of these undoubtedly valid complaints receive scant attention from quite senior university managers.

University staff

Although the Green Paper seeks to engender quantitative 'improvement' in the efficiency and effectiveness of its investment in higher education, the fact remains that the two most important resource investments available to a university, as to any educational institution, are students and staff. In ecological terms, the student body is essentially a renewable resource, but the staff on the other hand are, in a very real sense, close to being non-renewable.

Non-renewable resources require particularly sensitive husbandry. But there is a further complicating factor here in that not all of this particular resource is of equal value. There is ample evidence in some disciplines to suggest that the inflexibility of existing salary structures is a significant impediment to the appointment of first-rate staff. And within a single discipline, it seems only equitable that outstanding academics should be rewarded ahead of their more pedestrian colleagues. Both propositions argue for some greater flexibility than presently exists in salary structures, and I believe it is incumbent on academic unions and management to recognise and accept that this is appropriate since not all academics

contribute equally effectively or equitably to the corporate cause of higher education.

None of this should be taken as an argument for introducing the particular model of a flexible hierarchy canvassed in the Green Paper. This model should be rejected firmly not only because it flies in the face of normal community expectations, but also because public humiliation should no longer be tolerated as a suitable means of personnel management. The crux of this particular problem stems from the presently tight and inflexible relation between labelled academic rank and a particular salary scale; if the salary and nomenclatural structures could be disentangled sensibly, much of our presently embarrassing ineptitude in sorting and rewarding outstanding as opposed to acceptable performance could disappear.

Finally, it has to be said that any sensitive husbandry of hard-to-maintain or diminishing staff resources will require academic managers of very high standard. Some few are undoubtedly born, but many others will have to be made, and to this extent staff development programs for senior university managers and administrators are going to become crucially important within a very short time-span. It follows too that if sensitive academics are going to find their place in the sun, they will need to adapt themselves more closely to a particular niche in the academic forest. And not least importantly, regeneration of the academic groves will require constructive policies to ensure an input of the best young intellects from each generation into the university sector; we should not lose sight of the fact that existing strategic policies relating to life-histories of staff in universities are rather serving to guarantee a double generation gap within academic cohorts.

Epilogue

In this short and idiosyncratic commentary I have not attempted to cover all the issues raised by the Green Paper, but rather raised some of the matters which I believe are of particular importance in attempting to achieve those broad objectives which have been set down for the higher education sector. My sense of the present state of play is that, for all its undoubted defects and inconsistencies, the Green Paper has been enormously successful in generating a debate which the university sector itself should have initiated a decade ago. Although the agenda has now been written for us, the outcome of the debate will, I hope, be influenced very positively by the wide-ranging and constructive responses generated from within the university sector. Whatever may be in store within the White paper that finally emerges, it is predictable that the turbulent scene we are now witnessing is the pattern of things to come, not the storm before the calm.