

made into traditional universities but they must be given some 'university freedoms' so they can fulfil their proper role in their own style. It must also be recognised that in the present structure, based on any rational consideration of their responsibilities, they are the most

impoverished of all classes of institution in Australian tertiary education.

Finally to return to the political pragmatics of the respective roles of the Commonwealth and the States, it appears to us that the logic we have described confirms the case for a

diminution of the State's responsibility in short-term planning and institutional development in higher education. The State's role would be focused on longer-term planning of higher education but with strong involvement at the TAFE level.

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The binary system: a university perspective

Introduction

The binary system of higher education in Australia has recently attracted its share of critics. Indeed, the timing and origins of such criticisms may give the appearance of a well orchestrated lobby group seeking special benefits from an engineered change.

Universities are strangely mute in this process. Their public silence might be interpreted in several ways. One is that they have not yet perceived the potential dangers to the university sector. Another is that they feel so insecure as to accept the foreshadowed changes as inevitable. A third interpretation is that they are unafraid of the outcome, or at least regard it as of lower priority than many other pressing issues. Alternatively, it may be that their public relations and lobbying efforts are presently unequal to the occasion in getting their message across, whatever they might think.

There are several major difficulties in dealing with this topic. It is by no means clear what is meant by the term 'binary system'. There is no commonly accepted university perspective concerning the relevant issues. And it may well be that, at least from some viewpoints, one is really dealing not so much with the binary system, but a hidden agenda involving an attempted redirection of resources from universities and some colleges, to a selected group of beneficiaries.

If so, the argument shifts to quite a different basis than that of the ostensibly general principles involved. It then becomes simply a claim for more resources, by diminishing the role of universities, so as to achieve a change of role for the central institutes of technology.

Origins of the binary system

The binary system in Australia was set up for a reason, and it may be as well to remind ourselves of those circumstances.

It is a comparatively recent development. Prior to the British Robbins Report some twenty-five years ago, higher education was not administered as an orderly system in compliance with central policies. In the UK it consisted of a number of varying institutions, which had evolved quite separately from one another to meet specific needs. The concept of a centrally planned higher education system, and in particular the emergence of a binary system seeking different roles for classes of institutions, was a later development.

The same was true of Australia, with its variety of State-based institutions, each responding to particular local aspirations and needs.

There is much to be said for such an approach. The lack of system planning is not necessarily a serious weakness in higher education, although it does lead to a somewhat different market oriented structure as has evolved in the USA. Nevertheless, an increasing trend to impose a centralised co-ordination and control over the higher education sector has become evident during the last two decades, at both a State and, increasingly, a Commonwealth level.

There were several reasons. Foremost of these was the rapidly increasing public funding being directed to higher education, particularly by the Commonwealth. Such generosity has its costs. This led to an inevitable desire for system oversight, accountability, co-ordination, planning, rationalisation, and perhaps yet to come if financial dependence continues, greater intervention and direction. One might term that the Treasury reason for economical system planning.

The second reason was more visionary, although it had the same effect. Given the positive demographic projections and rising participation then foreseen, there was an urgent need to ensure adequate higher education facilities at a time of rapidly rising demand. It was good politics and thought to be good economics, to expand higher education, particularly when the political will was accompanied by the rising prosperity of the Treasury means. But, as indicated, the price of this political support was increasingly extensive system planning, of which we are perhaps only now seeing the logical outcome.

In Australia, the initial steps towards this system support were taken when the Commonwealth Government accepted the main recommendations of the Murray Committee (1957). The consequence was the Australian Universities Commission set up in 1959, together with significant university expansion.

By 1965, and against a background of student unrest, some reaction had set in. Although continued expansion of higher education was supported, the Martin Committee shifted direction to favour the expansion of technological and college education in particular. In doing so, they stressed the need for a wider diversity of higher education institutions, the strengthening of technical education, and for three distinct categories of major tertiary institutions; namely universities, institutes of colleges, and boards of teacher education. These were to be co-ordinated in a balanced way by a proposed Australian Tertiary Education Commission.

In the event the Commonwealth Government reacted by establishing a Commonwealth Advisory Committee on Advanced Education (Wark Committee — 1966), on government advice that a new system of advanced education was to be developed in colleges, outside of

the university sector. In effect, Australia moved to the present binary system of higher education, currently administered by the Universities Council and Advanced Education Council of the Commonwealth Tertiary Education Commission (CTEC).

Complications

Although the current system is referred to as being binary in nature, the actuality is rather different. For a start, there are three major sectors of higher education in Australia, rather than two. In addition to universities and colleges, there is an extensive State-based system of technical and further education operating at or about the level of secondary and post-secondary education. Co-ordination of the TAFE sector, which has been favoured by CTEC in recent years, is somewhat complex, with the Commonwealth, State, and State Departments of Education all being involved to some extent. In consequence there is a certain ambiguity about the administration of this third sector, despite its increasing importance in providing easy access to post-secondary educational opportunities for large numbers of students at relatively low unit costs.

In addition, the variety of institutions comprising the so-called binary system add a lively touch to what otherwise might be seen as an excessively constricting system. One might simplistically portray the binary system as constituting universities on the one hand, and colleges of advanced education on the other. In reality the two sectors themselves consist of institutions playing differentiated roles.

The college sector can be analysed in terms of the older central institutes of technology (DOCIT group), multi-disciplined comprehensive colleges, modified specialist teachers colleges, other specialised colleges, regional colleges, central technical colleges, and the balance of the TAFE sector.

The university sector might be seen as comprising the older central established universities, the national university, stronger suburban universities, and the lesser developed universities.

Given the variety of roles and circumstances, it is not surprising that each sub-group often tends to react in different ways to issues of the moment. In essence, the differences of viewpoint largely lie with those institutions (both colleges and universities) who feel sufficiently well established as to favour a more demand driven or market approach to higher education, and the other group

who feel threatened by any change from a planning environment which nurtures their existence. It is the old argument of free trade versus protectionism in a new guise. Should educational policy favour the strengthening of the academically strong institutions, or should it intervene to ensure a balanced and relevant development of the system, whatever that might be?

The binary system is not therefore a cohesive whole. Varying interests and differentiated roles are involved. The range of recurrent grants varies as much *within* the university sector and the college sector, as it does *between* the two sectors. There is no indication that this situation would change even if the binary system is abandoned, or if the various institutions were all to be called colleges, institutes, or universities.

Something more fundamental than administrative systems or institutional names is involved in differentiated roles and funding levels. That of course is as it should be if all reasonable demand for post-secondary education is to be met for each of the market segments involved, in a balanced way, within whatever constraint limitations might exist.

Differentiations

As indicated above, the variety of institutions involved and overlapping responsibilities and performance levels make it difficult to generalise too far when seeking reasons for these special roles. However, as a group, the college sector might be said to possess the following characteristics: they have tended to be a little less autonomous than universities; closer to the community, more locally oriented, more vocational, more teaching oriented, more emphasis on teacher training and business, more politically favoured, more expansive, in some cases more aggressive, and better resourced in terms of funding increases, but with lower funding levels per student.

The university sector might be said to place a higher value on autonomy, be more oriented to the national and international community, accept a special obligation to carry out research, have a commitment to excellence rather than numbers, attract the better quality students, possess more highly qualified staff, produce more publications, have been less favoured over the last fifteen years, also have experienced considerable financial pressure but been resourced at higher levels per student.

These are significantly different roles; not necessarily better or worse roles

from the community's viewpoint, but ones which go a long way to offering the community a wide range of choices. To that extent, the binary system appears to have succeeded in meeting the Martin Committee objective of supplying a greater diversity of tertiary education in Australia. However, the Martin Committee went on to warn that 'any hope of achieving this diversity would be nullified if colleges attempted to transform themselves into universities!'

It is this boundary, and the need to extract the maximum value from the resources provided for the educational benefit received, that may justify a continuance of the binary system, irrespective of whether it is administered by two councils or by one unifying administrative organisation which reviews the tertiary educational sector as a whole. Tertiary education itself is not readily divisible other than in an arbitrary way, but the need to plan for a diversity of institutions offering a variety of entry levels, exit levels, transfer arrangements, and community roles is ongoing.

The Martin Committee recognised the continuous pressure to escalate such roles, given the mistaken but understandable human aspirations involved. In business, this pressure is recognised by upgrading models successively until such time as the product loses financial viability, at which time it is downgraded or terminated. It is tempting to say that this could not happen to educational organisations, but given a sufficiently long time horizon, in a non-expansionist environment, it does happen, and with much the same consequences.

The question then, is whether to insist that the past differentiation of roles be continued, and if not, what new organisational forms should be devised to provide for the eventual downmarket mass expansion which is likely to take place.

The demographic indicators suggest a slowing growth, or in some cases decline, in higher education into the coming decade. It is this, much larger, decline in the UK which is leading to the adoption of contraction policies for higher education in that country. The Australian demographic outlook is much less threatening. Even so, the bulk of any significant increase will emanate from increases in the participation rate in higher education.

Most of this will be students drawn from the lower half of school leavers qualifying for tertiary studies. The likely *affordable* demand will probably be for shorter courses at institutions catering for this particular end of the market. Some such able students will feed through to more advanced studies at universities or colleges, but the majority will not.

Consequently, the most pressing policy questions will concern the problem of how to encourage such students to complete their full secondary schooling, to participate in higher education, how to devise appropriate courses with transfer and feeder arrangements, and how to fund such expansion effectively at least system cost at a time of increasingly difficult public financing.

Since this expansion will be at the low end of the higher education sector, most of the policy emphasis is likely to be placed on an adaptation of roles of existing institutions at the margins concerned; namely some upgrading of TAFE, some downward extension of advanced education; or the creation of a new set of institutions to meet the newly emerging market at cost levels somewhat below the existing advanced education grants, if existing institutions fail to respond to this need.

The hidden agenda

It is against this background that some demands are being made to abandon the binary system. As indicated, the binary system itself is not critical to this discussion. Rather, it is the shaping of institutional roles to meet foreseeable needs in an economical manner that is important. The current binary system was designed fairly recently to achieve such goals. It has been largely successful in offering the necessary diversity of roles and opportunities to the community up to now.

The real issue being debated concerns the funding of higher education institutions. Both the university sector and college sector have suffered from real funding reductions for some time now and the strains of lower Commonwealth priorities for higher education are showing. The Universities Council and the Advanced Education Council have both made some forthright observations on the need for additional funding, and may well consequently both suffer the usual fate of bearers of bad tidings. Be that as it may, there is some danger of a new and disquieting development in tertiary administration.

For all of the pressures and disappointments of the past, the need for greater inter-institutional co-operation is becoming more widely accepted. Such collaboration is a delicate matter which can all too readily be viewed as condescending, threatening, or disloyal by the parties involved. Yet it is essential to ensure that the community benefits from the widest possible opportunities and services in the region.

Such co-operation is not encouraged by internecine squabbles between in-

stitutions. A view that one group of institutions should be better funded is quite understandable. A view that they should be funded at the expense of other higher education institutions can hardly instil confidence that the co-operative model has much of a future. That would be a pity. One suspects that tertiary administrators have enough on their hands without having to ward off attempted grabs by their distinguished colleagues elsewhere.

The grass may well appear greener from a distant hill, as all universities who have struggled to make ends meet in recent years will know. From the college viewpoint however, universities are seen to receive more in recurrent grants per student than do colleges, although even this differential has almost vanished under marginal funding arrangements currently being experienced. Why not redistribute that premium to colleges, or at least to the central institutes of technology? If the direct approach fails, why not try the indirect approach? That tactic would involve an attack on the binary system, together with its symbolic distinctions regarding university status, research funding and doctoral degrees. Once the boundary lines are removed, it would be so much easier to step across and change roles. That of course was precisely what concerned the Martin Committee.

In the event the recent UK experience seems to have confirmed their fears. The conversion of successful colleges of advanced technology to universities has not been an unqualified success, while leaving the non-university sector all the poorer for the change.

In defence

In one sense, it is of little consequence what happens provided that each institution is treated equitably, for in the long run it is the academic performance that counts. Suppose a market system of higher education were to be adopted in Australia. That presumes a fee system, accompanied by widespread scholarships for the needy, with no undue constraints on institutions, so as to be able to respond to those community needs which are perceived to be central to their roles. Fee income should accrue to the institution. There would no doubt be some surprises, depending upon the level at which fees are set, but in general one might expect the stronger universities to hold ground, together with the stronger colleges of advanced education. On the other hand the weaker institutions, including those with sound long term futures, might fail. The initial system cost could be quite high.

It can be shown that such higher education systems do work elsewhere and do possess advantages. But it is by no means clear that for Australia the benefits would at present necessarily exceed the cost, particularly in the absence of a strong underlying and supportive cultural ethos favouring higher education. The shock could conceivably deprive the country of a generation of highly educated personnel before such a culture developed. One would accordingly expect any changes to be implemented gradually, if at all, if that danger is to be minimised.

In the absence of such a system, and against a background of extensive reliance on public funding, it will necessarily be the planning and co-ordination bodies which make such decisions as to the general balance of the system, and of the sector roles involved. In general, one might expect such bodies to set a framework which commences with an approximation of market forces, but modified so as to conform to such constraints as financial, human or physical resources, quality, quantity and other performance factors, desired political objectives, and some statesmanlike vision as to the necessity of making adequate provision for longer term higher education needs across all sections of society.

At present, the judgement of such co-ordinating bodies is that the community benefits by granting the university sector somewhat higher funding levels than the advanced education sector.

Another way of viewing it is that the advanced education sector has been expanded more rapidly than universities because of that differential; that is, for a fixed higher education budget it has been possible to increase participation to a greater extent than might otherwise have been the case. Such a process must have political appeal, but only for so long as the lower resource costs apply. Success in equalising university and advanced education grants would certainly diminish the political attraction of the college sector. The likely result would be a new set of institutions, funded at a lower level, which may already be on the planning horizon. A change in funding arrangements would therefore not necessarily be to the benefit of existing colleges.

The differences in university and college funding have little to do with differences in teaching responsibilities. Universities and colleges have similar student-staff teaching ratios, and have both experienced teaching load increases of about 8% between 1980 and 1983. In some academic disciplines, some colleges appear to be better staffed than

some universities, but overall they are much the same.

Why then the differential funding?

The answer lies in the truism that there is no such thing as a free meal. Additional responsibilities are demanded for the additional funding. There are two main additional functions in universities.

The first relates to the mix of courses offered. Each course has a typical cost; some are significantly more expensive than others. For example, a number of universities offer such courses as medicine, dentistry or veterinary science, all of which consume resources at twice the average institutional funding rate, and which account for as much as a quarter of the university budget. Various areas of science require similar high levels of funding, as well as areas of postgraduate teaching and research.

The second responsibility relates to the research function. Although the staff of all institutions are free to apply for competitive research funds, should they so desire, it is a distinguishing characteristic of universities that they combine teaching and research as an essential part of their function. This research goes to create new knowledge, revitalise old knowledge and above all to help maintain a climate of enquiry and discovery which is communicated to all sectors of the university as a community of scholars.

It matters less whether this research is fundamental or applied, technological or otherwise, than the quality involved; the attitude of mind to curiosity and innovation, the need for constant adaptability, and the willingness to learn in a continuous seeking out for improvement. Social change stems from an attitude of mind, rather than the nature of the discipline taught. Australia needs capable and *thinking* graduates in a variety of fields; not confined to science and technology alone, despite their currently perceived importance. Universities are particularly well suited to such a role, although they do need to shift closer to university-industry interaction if research is to be better translated into effective development.

A good deal of worthwhile research is also conducted in the advanced education sector, made all the more valuable by their close industry relationships. Most likely that contribution will increase. But it would be quite wrong to suggest that universities are only interested in fundamental research, as a perusal of their substantial publications and industry related applied research or consultancy activities soon reveals; or that university research is somehow inferior to college research. That does not

show at all in the comparative performance data. Some college staff are fine researchers indeed, but the overwhelming concentration of research talent, research support, outside research funding, and research activity is to be found in the university sector.

If such research funds were to be redistributed elsewhere, on criteria other than proven research ability, it is likely that the resulting diffusion of resources would considerably diminish the role of universities in both teaching and research, and lead to a considerably lesser social return on the aggregate public investment in higher education.

These remarks should not be construed as discouraging able researchers in the college sector. There is a very real contribution to be made in selected areas of strength at such colleges, and the level of available funds to expand such opportunities needs to be increased.

But in the view of this writer, it would be wrong to redirect university funds to do so. One does not improve an educational system either by levelling it down, or by changing educational roles to the detriment of the system as a whole.

The future

The Washington-based Brookings Institute recently noted the widespread endorsement of egalitarianism in Australia. In so far as this relates to equal opportunities and social justice that is no bad thing. But there are economic consequences as well. One is the tendency to level excellence down, as is the current danger in Australia. We should instead be trying to improve the quality of higher education, as well as extending its availability. That is not likely to be achieved by diminishing the already scarce resources being invested in university education.

On the other hand, there is much to be said for the accomplishments of the college sector. It too needs additional resources if educational standards are not to slip under the mounting financial strains. The special roles played by the various institutes and colleges need to be encouraged, rather than diminished.

They have much going for them, for some have been remarkably successful. As expanding institutions until recently, they have found it easier to commence activities on an innovative basis, and to explore initiatives. They have been better organised, and better planned, than many universities. It is always more difficult to change or eliminate an existing activity, fixed in traditional ways, than to create a new one. In consequence, universities have

tended in comparison to appear unresponsive at times when compared to expanding colleges.

That advantage is now diminishing as many colleges also move into coping with the ongoing difficulties inherent in a steady state funding situation. They too will find the cold hand of restraint dragging them back as unfunded cost escalations place increasing pressure on inadequate college budgets. Both universities and colleges will be challenged to discover ways of improving efficiency, selecting priorities, encouraging ongoing innovation, attracting additional support, and somehow making room for new ventures so as to avoid the loss of academic vitality, without which little can be achieved.

The next development is likely to be an expansion of educational opportunities downmarket which could, and in the writer's opinion should, see a doubling of the presently low participation rate in higher education over the next two decades. However termed, a system of arts and sciences community colleges may well evolve to offer two year associate degrees which lead into feeder arrangements to higher degrees elsewhere for the academically more able student.

All this will come to little if universities and colleges do not possess the places to offer such upwardly mobile students. At present enrolment restrictions are limiting such possibilities.

Participation, equal opportunity, transfers, efficiency, and excellence are all part of the package of a properly financed higher educational system in which each institution plays its role to best community effect. If not, the answer does not lie in institutional infighting. It lies instead in improved and jointly supportive lobbying and public relations, together with such adjustment to circumstances as most preserves the function of the institution concerned to make its special contribution to society, within whatever resources may be available at the time.

In this way, each institution can fulfil the mandate to contribute its special strengths to a balanced system which optimises the overall benefit to the community at large, through the vigour and offerings of each institution concerned.

Notes:

1. Based on a paper given at a seminar on 'Institutes of Technology: Responsibilities, Relevance and Resources' held at The Western Australian Institute of Technology on 13 February 1985.
2. Sources based on the Robbins (1963), Murray (1953), Martin (1964), Wark (1966), Williams (1979) Committee reports and respective reports of the various Commissions involved.