changes. I think, for example, of the desire to promote the development and use of new technology; to bring about the social and economic adaptations necessary for coping with the impact of technology; to find ways of using our increased leisure time which are socially and personally productive; and to develop a better-informed society.

The universities and institutes — there might be 25 or so in all — would probably have somewhat lower enrolments than at present. They would not be called on to offer general higher education, so that their faculties of humanities and science would probably become smaller, containing only the relatively few students who will become the outstanding scientists and scholars of the next generation. They would, therefore, be in a position to devote more of their effort to research and postgraduate training and, for these activities, all the institutions in this group could be regarded as a single system funded on a common basis. Such differentiation as exists within the group could be based on the selective development of those vocational courses or research programmes in which they exhibit and maintain particular excellence. Also contained in this sector would be the highly specialised and smaller colleges which have not been developed as liberal studies colleges; they would work in close collaboration with a university or institute.

It is particularly important that the two sectors of higher education, with their clearly defined differences in role, should nevertheless interact regularly and productively. In particular, it should be possible for students to move freely between different courses as their abilities or circumstances permit; for networks of related institutions to share equipment and specialised facilities; and for staff (all staff, whichever sector they serve in) to have opportunities for maintaining their scholarly standing and an awareness of the academic work and development occurring throughout the entire system. It is, in my view, one of the more serious weaknesses of our present system that such interactions do not flourish vigorously.

So much for my own blueprint for the development of higher education in the next decade or so. It is always important to ask how one might gauge the success or failure of such a venture. I suggest that we might base this on four considerations. First, has there been a significant increase in participation in higher education? By 'significant', I am thinking of, say, a doubling of the present participation rate of 17-21 year-olds in higher education — a change which would bring us close to that in countries such as Japan, Canada, and the United States. Second, we might hope to see an improvement in the standard of public comprehension and discussion of important issues. It is not uncommon for academics to echo Newman's remark, that the special function of the universities is 'to raise the intellectual tone of society', by claiming that the function of higher education is 'to train minds'. We should attempt to find evidence of our success or failure. Third, we might seek the views of employers, both public and private, about the adequacy of our courses as a preparation for employment. If an important justification for the support of higher education is its social utility — as I believe it is — then it is clearly necessary to ensure that our utility is appreciated by those who employ our graduates — and if they do not, then we must ask ourselves why not, and take the appropriate remedial action. Fourth, an effective system of higher education is one in which basic research activities are maintained in strength across the whole field of human knowledge, and in a way which permits the application of basic research findings in industry and commerce. We should, therefore, attempt to measure the extent to which higher education develops and maintains strong working links with industry and government research organizations, and the capacity of the system to offer postgraduate programmes which will prepare able students for careers as applied researchers, as well as in scholarly research. It does seem to me at the moment that we give too little attention to producing an appropriately differentiated range of such programmes; and, therefore, that a willingness to listen and respond to industry's expressions of need for postgraduate training, could provide us with a very useful evaluation of our success in this aspect of our work.

All in all, I suggest that the formulation of a coherent statement of the goals and objectives of Australian tertiary education is a pressing national responsibility, and one which must be undertaken now if we are to ensure that this education makes the fullest possible contribution to Australian society as we enter the 21st century. For, as has been pointed out 'today's children will inherit a world of high technology, and they will probably spend less of their lives in paid employment than any previous generation. While at work, however, they will need to be more efficient and more productive than ever before. In work and in leisure (and I would add, as citizens) their well-being will depend on their knowledge, skills and creativity. Universities . . . and colleges are not the only social institutions involved in producing and disseminating knowledge, developing skills and cultivating creativity, but their role is a crucial one.' It is up to us, now, to see that our system of tertiary education can in fact play that crucial role.

The co-ordination of higher education in Australia

Brian W. Smith
Director,
Royal Melbourne Institute of Technology

Donald W. Watts
Director,
Western Australian Institute of Technology

Two contrary views have emerged on the restructuring of higher education. One view, whilst acknowledging that there are deficiencies in the present structure of higher education, claims that change cannot occur while we have the present constraints on funding. On the other hand there are those who claim that, in a climate in which an increase in total funding is unlikely for a number of years, a restructure of tertiary education is an essential step in matching educational aspirations and funding realities. We hold the latter view.

Since the present structure was established all three sectors of tertiary education have changed greatly. The universities can no longer claim to be a homogeneous set of institutions whose development and responsibilities stand them apart from other institutions. For them to aspire to be such a set would not be in Australia's best interests. Regional universities such as James Cook, Wollongong and Newcastle should be responsive to local needs in ways which inevitably lead them to be quite different from the major metropolitan universities.

The colleges of advanced education (CAEs) have suffered a chaotic decade. The sector first of all absorbed the teachers' colleges which then had thrust upon them a process of forced amalgamation, indicating that successive governments had limited understanding of the directions in which the institutions and the sectors were evolving in the service of the Australian community.

More recently the Technical and Further Education (TAFE) sector has enjoyed priority in financial support, emulating the previous growth periods of the other two sectors. Uncertainty has been created in the area of overlap with the universities and the colleges and, in some States, there has been neglect of the role of TAFE in the provision of skills training for the sixteen to eighteen year olds.

Any discussion of a restructure of post-secondary education is complicated by the manner in which arguments on educational philosophy overlap pragmatic political considerations of State and Federal roles.

There is educational merit in considering post-secondary education as a spectrum without sharp or fixed boundaries between sectors and in providing co-ordinating mechanisms and structures which transcend sectoral boundaries. However, government funding of the universities and CAEs comes entirely from the Commonwealth whereas TAFE funding is supplied by a joint arrangement in which the States are the major partners. All universities and colleges have corporate independence whereas, in many cases, TAFE colleges are part of a State system of education linked with the primary and secondary schooling system. All these features suggest that the co-ordination of the TAFE sector should be treated differently from the colleges and the universities.

Most of the colleges and all the universities in Australia exist under individual State Acts, they are all funded by the Commonwealth and differ only in respect to the role played by the State co-ordinating body. In all States except Victoria the Acts establishing State co-ordinating authorities give them powers in respect to colleges which differ from those they hold in respect to the universities. In Victoria, the Act for both sectors is the same but the treatment by tradition is different for universities and colleges leading to a situation which is essentially the same as the other States.

'There is little doubt that the present balance of powers, as far as the colleges are concerned, produces a tension which is damaging to the sector . . .'

The system involving two levels of co-ordination and accountability is worthy of discussion. There are two features which warrant consideration. The first relates to the accountability demanded by the State Acts under which all institutions, except those in the Territories, are established and also to the accountability to the Commonwealth, the provider of funds. The second feature relates to the planning and development functions, in the end controlled by the Commonwealth, the provider of funds, but influenced by State co-ordinating bodies to degrees which differ for universities and colleges.

The universities cling wisely and firmly to the autonomy provided in their State Acts which they see as a protection against a total domination by the Federal Government and the Commonwealth Tertiary Education Commission (CTEC). They also see great benefits in the condition of tension that exists between the States and the Commonwealth in that in their development they are relatively immune from the controls of the State bodies because the Commonwealth alone has control of their funding. In this they are wise because it is difficult to imagine a less logical system than presently pertains to the colleges where conflicts on capital development between State and Commonwealth bodies must ultimately be decided by the Commonwealth through the allocation of funds. However, local issues, particularly those relating to the recurrent funding of small colleges, are seldom seen as important in Commonwealth eyes and as a result, State bodies divert funds from the larger colleges to support smaller colleges whose continued existence may not be a Commonwealth priority. In these cases the Commonwealth claims that the total funds are adequate and that the State body has created the anomaly. Neither body can be held to be responsible for the problems faced by the management of the suffering institutions. There is little doubt that the larger colleges see advantages in a system similar to the universities. On the other hand, smaller colleges, particularly those in regional areas, have more reason to support the existence of a strong role for State bodies.

The realities are that there will always be a State and a Federal role. There is little doubt that the present balance of powers, as far as the colleges are concerned, produces a tension which is damaging to the sector and inflicts unreasonable uncertainties on those who are faced with the problems of institutional management.

Either of two alternative models, one with a shift in the balance of power to the States and the other with a shift to the Commonwealth, so all institutions are on the present university system, would be preferable. In the former the Commonwealth would assume a long-term planning role and would provide the funds on a formula basis to the States which would distribute them to all institutions. The universities, the institutes of technology and the stronger colleges have seen in their Commonwealth funding a recognition of their national character and would not like this model. However they would be wise to watch the interventionist stance presently obvious in the CTEC and to recall the security they enjoyed in the past under State funding controls. Our governing statutes are the guarantees of the traditional freedoms of all institutions. It would be a more serious political decision for a State government to alter the provisions of our Acts to achieve a particular purpose than for a Commonwealth government to achieve similar ends simply through the curtailment of funds. There are sound arguments for a shift in power in either of the two possible directions. There are few to support a maintenance of the balance presently applied to the planning, development, and funding of the college sector.

Moving on from these issues of political control we now pursue arguments based on educational

philosophy, on the community's needs and on servicing these needs. The questions are relatively uncomplicated. They are: Is Australia best served by a binary system of higher education? If so, is the present division into nineteen universities and forty-five colleges the best way to divide higher education into two sectors? If not, should there be a single higher education sector or one divided into more than two classes of institution?

All institutions in higher education provide for the community, at the community's expense, a range of services which can be classified as one of, or a combination of, teaching, research and professional community service. Universities have claimed a special place in the international community of universities and a national character, supported by their relative freedom from State interference. However a characteristic of Australian universities is that their students are mainly drawn either from overseas or from their own State and in this they are similar to the major colleges.

The universities alone have access to recurrent funds to support doctoral studies. However the central institutes of technology have significant post-graduate enrolments and growing research reputations particularly in applied research and innovation. They have gained this reputation despite the absence of recurrent government support. In a country with sparse research capacity thinly spread over huge distances it would be foolish not to develop the significant applied research potential of the human and capital investment which already exists in these institutes of technology. There is no argument to suggest that these institutes should transform themselves into traditional universities either by designation or by philosophy. This would leave a gap in Australian education. It is also vital for tertiary education in Australia that our significant universities (having observed community support for the service provided by the institutes) do not move too far from their traditional roles in long-term fundamental research. Some who believe that labels determine status and that classifications should determine rights see a solution in reclassifying the major institutes of technology as universities of technology. There are attractive features in this solution which follows closely the German and Japanese structure.

The teaching of only the professions of medicine, dentistry and veterinary science remains exclusively the responsibility of the universities. There are many professions which are not taught in any of the Australian universities, while some other professions in some States are catered for only by institutes of technology and single purpose colleges. It is clearly not in Australia's best interests for these professions, either Australia-wide or in some States, to be deprived of proper post-graduate training and research activity simply because the country has provided the basic teaching infra-structure for the profession in an institute or a college.

Some colleges of advanced education teach substantially at the UG3 level. Courses at this level are also taught at the University of Wollongong. How much better it would be for the future of education in both Newcastle and Armidale had the narrow interpretation of the binary system not led to the continued existence of two separate institutions in each of these places! The broad-spectrum offerings in the early development of the now great land-grant universities in the United States were a better model for Australia to follow in the service of these regions than to adhere slavishly to a baseless model which claims that in undergraduate teaching at any level a 'university style' and a 'college style' are in some way incompatible. In attempting to provide the best Australia's money can buy in education it is as foolish to claim that no university should teach at the UG3 level as it is to claim that no college should have a doctoral programme.

'The future prosperity of our country lies with its people and their capacity to innovate'.

CAEs, particularly the institutes of technology, have a high part-time enrolment, notably at the post-graduate level. This feature produces a healthy contrast with the universities. It helps women looking to return to the workforce. It helps many people prepare for changing professional roles, and in research Masters degrees it produces industry-based activity less likely to be found in universities. It is the closeness of industry to the institutes and the nature of the research which is generated through this contact that will lead to a predominance of research degrees at the Masters level, as occurs in engineering in Japan, even when the institutes have licenses for doctoral programmes.

Universities have been much better provided with halls of residence and colleges. These facilities can produce a 'university atmosphere' but in Australia grew from the policies of the churches as much as they did as a result of educational planning.

In the professional areas, such as engineering and law, serviced by both universities and major colleges, the staff, students and graduates of both types of institution have served their professions with distinction. It has been established to the satisfaction of professional bodies that while the graduates tend to be different in their approach upon graduation they are all professionally competent at internationally accepted standards.

Tertiary institutions also have a role to play in honest intellectual appraisal of a country's policies and of social and environmental trends. The governing statutes under which institutions are established, as well as their management attitudes, must permit an atmosphere in which free intellectually based commentary and criticism of change (or lack of it) are seen as responsibilities of tertiary institutions. Government sensitivity, inaccurate media reporting, our inherently anti-intellectual society and the recent evolution of some of our tertiary institutions from direct government control, all these are Australian features that have inhibited the development and acceptance of this institutional responsibility. This failure to produce learned public commentary is evident in all our tertiary institutions. Regrettably in both colleges and universities we find this critical energy too often wasted on trivial arguments of self-interest focused on matters within institutions.

This incomplete summary of some of the activities in higher education indicates that in some senses our 15 million people are provided with a full spectrum of intellectual, learning and training experiences. This provision would be adequate if the fifteen million people were in one city such that all had ready and reasonable access to the whole range of offerings. It might also be acceptable if the full depth of intellectual activity was offered in all disciplines and professions. In Australia there are not only deficiencies in the nation's total provision of educational opportunities but there are substantial gaps on a State and regional basis. Many of these deficiencies are exacerbated by the anachronisms of the division of higher education into two sectors, each with limited licenses, either self-imposed to preserve the difference or imposed by bureaucratic demarcations which are thoughtlessly applied as a substitute for value judgements.

There are not just two types of institution providing Australia's spectrum of higher education. There are the major metropolitan multidisciplinary institutions, some of which are universities and some institutes of technology. There are a number of major metropolitan colleges, many of these multicampus but with limited professional breadth. There are regional institutions, some being universities and some colleges all with limited breadth, some prestigious single purpose colleges, and some metropolitan universities which are still developing a limited range of professional courses. It is our view that all these institutional features and many more should be recognised in the way Government treats all institutions involved in higher education, and that all of these features are more important than the differences remaining between the spectrum of activity found in the classes of institutions known in Australia as universities and colleges.

No-one would claim that all sixty-five higher education institutions should offer doctoral degrees, indeed many have no case to provide Masters degrees either on the grounds of the professional and intellectual breadth of the institution or the learning opportunity demanded by the community served or likely to be financially justified. On the other hand to claim that Australia is best served by limiting doctoral studies to universities and to see this limitation as the only reason to preserve the binary system is nonsense.

Two examples are adequate to demonstrate the detriment suffered by Australia through this limitation:

1. The future prosperity of our country lies with its people and their capacity to innovate. We must not only seek to gain an increased value added component from our mineral and rural industries but we must also seek new internationally competitive manufacturing industries. Compared with our competitors in our major future market places of the Indian and Pacific Ocean regions we have a small expensive workforce. We must seek our advantage in the quality of our workforce and the advanced nature of our products. This demands that every part of our nation's investment in human and physical capital be mobilized as efficiently as possible in the processes of research, development and innovation. It is almost unbelievable that an arbitrary demarcation of the binary system limits the contribution of our major institutes of technology in the area of one of this country's most vital and obvious needs.

'Never before has there been a greater need for evaluative research into all aspects of Australia's education system'.

2. Historical changes in the structure of Australian education have accumulated the major human resource in the area of educational evaluation and development in the college sector. Never before has there been a greater need for evaluative research into all aspects of Australia's education system. Never before has there been a greater need for post-graduate training and professional development for our school system. Never before has it been so important to increase the professional competence and standing of our teaching profession. There is no defence for a demarcation which limits the capacity of such a major human resource from meeting a major national need in post-graduate training and research.

The demarcation also limits the work of the Victorian College of Pharmacy in its special responsibilities and of the Western Australian Institute of Technology (WAIT) in the service of the State's mining and chemical industries in professional areas not represented in either of the State's universities. There are numerous other examples where professional post-graduate development is inhibited in Australia by the restriction of post-graduate training and research in the college sector, particularly in the allied health professions in which university involvement is relatively small.

The only argument against bringing the two sectors together into one is that some arbitrary prohibitions which exclude all but the universities from certain activities will have to be replaced by judgements about institutions, and parts of institutions and about the legitimate demands of students and of the communities the institutions serve. However, for instance, there should be little argument about a growth in post-graduate activity at WAIT in engineering and applied science, health sciences and business, particularly as much of the work is not duplicated elsewhere in Western Australia.

There are also areas in WAIT's Division of Arts, Education and Social Sciences, particularly in the visual arts, not duplicated elsewhere in Western Australia, in which post-graduate growth is justified, and indeed essential for the provision of a balance in educational opportunity in Western Australia. On the other hand it would be difficult to argue against the continued existence and use of the joint doctoral agreement with the University of Western Australia whenever such an enrolment seemed justified in the social science area or in any other area where the university could provide a demonstrably superior intellectual environment for the student. The same judgements should be made in encouraging co-operative programmes between larger institutions and some of the newer universities where the research environment is often limited and thus the post-graduate student can be merely a pair of hands for an isolated researcher.

We believe that all these judgements can be made by a properly constituted CTEC consisting of two Councils, one for Higher Education and one for Technical and Further Education. There should be common membership or a liaison system between the TAFE Council and the Commonwealth Schools Commission. The Higher Education Council should have two standing committees, one on course work activity and one on research, development and innovation. These two committees would advise the Council on institutional involvements in teaching and research and on the funding necessary taking into account State and regional requirements and costs, economies of scale and the relative costs of teaching in the various disciplines and professions.

A system such as this promises a more responsive system and one which will maximize the efficiency with which the taxpayer's dollar is invested in teaching, research and professional community service within our tertiary institutions. There may be some reallocation of resources in these times of financial constraint which would cause some temporary pain in some institutions. On the other hand if Government and the community can be convinced that a new system is capable of producing better value we may see an increase in the country's investment in higher education after nearly a decade of neglect.

While strongly supporting the structure we have outlined, we recognise that conservative elements may leave us with a binary system. If this proves to be the case we strongly urge a reassessment of the position of the institutes of technology whose contribution to Australia is greatly restricted by their position in the college sector at a time when an expanded role for institutions of their particular style has never been more important. They should not be

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.

The binary system: a university perspective

Roy Lourens
Deputy Vice-Chancellor,
The University of Western Australia

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 constraining 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.