"it may be argued that most, if not all, of the facilities are presently available in Australia." Yes. So, why start up another group of (expensive) institutions? Well, we are told that this is a good idea because it is easy (easier that is to say than to change already existing institutions); they will be easier to control; and the students will benefit from the variety of courses, the mixed intake, the possibility to make changes. Now, if all that isn't clear enough, what more could anyone ask for?

There may be some people who are not convinced that the present system is inadequate and that these comments provide enough of a basis for future planning. Well, it turns out that Professor Dennison has covered present problems as well in his review of the community college concept. Overall, he thinks there are three problems: the different parts of the tertiary sector pursue different objectives, and don't co-operate; students can't transfer between institutions unless they are motivated (clearly here the logic is that unmotivated students should be allowed to transfer with ease); and there are problems in the funding machinery. In relation to the last of these points there are problems of course - but not the ones which Dennison noted, since these were some of the facts he did get wrong. In the final section of the report, Dennison goes into some detail in looking at the various component parts of the postsecondary sector, which need not be repeated in detail. Two examples should suffice. He notes that the universities here are as good as any elsewhere - and then he notes somewhat critically that they are reluctant to change. The connection between these two points clearly eludes him. Equally, at the other extreme, he is worried about the effects of the final public examinations taken in secondary schools - after all, he notes, if you dropped the HSC or its equivalent, the schools could do anything they liked, couldn't they? How true.

When all the talking is over, we do get presented with a set of recommendations. They are not so much to do with the provision of opportunities for life-long learning as with the restructuring of post-secondary education. No matter. Indeed, we do want to follow Dennison's suggestions and develop a 'unique' solution to Australian needs, and we also do want to take account of other systems in other countries. (The maxim seems to be: Do it different, but not too different). The solution he puts forward is simple; that we should set up co-ordinating bodies for post-secondary education in the States:

that courses and programmes should take account of community and manpower needs; that the TAFE area should be recognised as an autonomous and equal partner with the others; and that we should make the Institutes of Technology and a few of the larger CAEs (about 20 altogether) into universities. Then everything else which is not a university could become a community college. Now there's a unique solution. There is no doubt that Dennison has considered the applicability of the community college concept. By and large, it seems, we can completely restructure the pattern of post-secondary education and introduce the community college concept just by changing some names. Admittedly there are a few problem areas, where there is not a college already available to become the new community college, but otherwise it is all easy, cheap, and very tidy. Well, fairly cheap, as there may be some unscrupulous people who, once they find they are now running a community college, will feel that they need to expand. All this might make you wonder who Dennison spoke to, and the convenient list at the end of his report reveals some very interesting omissions. Look at South Australia as an example, where Dennison "cannot help being impressed" by the approach developed in the FE area: He didn't see anybody else!

Dennison urges that we discuss his report "in the spirit in which it was written." I hope we don't. To be fair to Dennison, when he prepared his report he did not expect it to be published, but published it was. It represents a tradition in future planning that we need to avoid. It was recently exemplified yet again in a Commonwealth Seminar on 'The Changing Balance in Federal/State Responsibilities for Post-Secondary Education in Two Federal Systems in Australia and the United States' which was held. for a privileged few, in March 1977. There the strategy was to invite outsiders to come and tell us what we should do. Surely we are now able to discuss and analyse these matters ourselves — and openly too? It really is not good enough to be reading Dennison's report nearly four years after it was written, or to be hearing about seminars through the grapevine. Dennison also suggests in relation to his report that "doubtless it will raise many reactions." I certainly hope it does. In talking about accountability we need to be thinking about universities in the future, and in looking forward we need to be accountable.

MERGER PROPOSALS FOR SOME N.S.W. UNIVERSITIES AND TEACHERS' COLLEGES: ISSUES IN UNIVERSITIES, 1969-1975

Wendy Gibson
Department of Politics,
University of New England

Between 1969 and 1975, proposals to merge three N.S.W. universities and their neighbouring Teachers' Colleges (now Colleges of Advanced Education) at Newcastle, Armidale and Wollongong gave rise to much formal and informal debate within the institutions concerned.¹ This article deals only with the issues raised by academics in the Universities concerned and which appeared in writing. It is intended as a background to the present discussions which have arisen from the policy recommendations of the 1977-79 triennium reports of the Universities Commission and the Commission on Advanced Education: these require further consideration of rationalization in selected cities.

An evaluation of the arguments themselves, and of the weight they may have carried in the policy making process, is not attempted here. However it is important to note that in the cases of Armidale and Newcastle, merger proposals were not initiated by academics and that there were, and still are, factors external to the universities which would have to be taken into account in any comprehensive merger policy study. Such factors include political constraints, fiscal considerations, and the influence of other educational agencies on the policy process.

Similarly, within the universities themselves, decision-making procedures and issues of the merger debate were inter-related. Modes of debate varied, each university having its own complex decision-making process. Here, the arguments of academics about the advantages and disadvantages of merger are divorced as far as possible from the institutionalised and ad hoc procedures of debate used by academics to air their views on merger. It is important to point out that in reality they were not separate.

Although arguments recorded in university documents are not necessarily without bias, or reflective of the whole debate, they do include a spectrum of opinions voiced by various faculties, departments, groups and individuals within the three universities. The issues fall under nine headings, as follows:

The Role of Universities vis-a-vis C.A.E.'s

In each of the three universities there are some people who believe that universities and C.A.E.'s are different and that these disparate organisations should not be amalgamated. Dr. B. R. Miller of the University of New England (U.N.E.) attacked 'the tacit assumption that the institutions in question can be integrated simply because they are both tertiary ones.' He said:

That might be valid if they were tertiary institutions of the same kind — but they are not. C.A.E.'s were designedly set up to do a different job from universities — not necessarily a lesser job, but certainly a different one. Integration of a C.A.E. with a university would therefore result in the worst of both worlds, with neither institution able to do the specific job it was designed to do.²

On the other hand, Professor Short of Newcastle University (a protagonist for incorporation) believed that 'the universities and the colleges are to be seen as variations on a theme: all should be seen as engaged in what is essentially the same enterprise.3 In U.N.E. at Armidale, the Faculties of Science and Rural Science thought that if U.N.E. and the neighbouring College amalgamated the University might be regarded more as a C.A.E. than a university - with concomitant loss of status. They argued that although this might be relevant to universities at Sydney, Newcastle and Wollongong, it was much more so to U.N.E. Presumably the inference drawn was that the rural U.N.E., with its narrower range of disciplines, was more likely to be regarded as a C.A.E. if merger took place than would be the case if this happened to metropolitan universities with their wider range of disciplines.4

Competition for Students

It was recognised that university student enrolments were likely to be reduced simply because C.A.E.'s had been introduced in various parts of the State, thus providing an alternative form of tertiary education. Moreover, in Newcastle University and U.N.E. the point was made that a large proportion of students enrolled at those Universities were in receipt of teacher training scholarships from the N.S.W. Department of Education. At Newcastle University in 1969, 50% of the first year intake of Arts students and, perhaps, 60% of all full-time students held such scholarships. At U.N.E. the Vice-Chancellor wrote:

In any consideration of the academic implications of the proposed merger, it must first be recognised that already the University has a widespread involvement in, and dependence upon, teacher education in the last seven years, (pre-1971) 65% of the growth of the University's internal undergraduate numbers has been directly

Dennison J., The concept of the community college; in Lifelong Education and Poor People: Three Studies. Canberra: Australian Government Publishing Service, 1976, pp. 51-71

dependent upon the enrolment of Teacher Education scholars,*

If mergers did **not** take place and two degreegranting institutions developed separately in the one city, the result could be a decrease in university student enrolments if the N.S.W. Department of Education allocated more scholarships to those C.A.E.'s and less to the universities. Since teachers' college pass rates were higher than those of universities it was felt that the N.S.W. Department of Education might prefer to send teacher trainees to C.A.E.'s rather than to universities in order to maintain a consistent supply of teachers;' the incorporation of C.A.E.'s within Universities at Newcastle and Armidale would eliminate the possibility of competition between those organisations.

Quality of teacher trainees was also taken into consideration. It was said that teacher trainees studying arts and economic studies at U.N.E. were of better than average quality and that incorporation of the College would ensure their retention.⁸ However, in the documents relating to amalgamation in Wollongong there is no reference to either the university's degree of dependence on teacher training students or to arguments in favour of incorporation on the grounds of a possible future rivalry between the university and the C.A.E. for student teachers. At Wollongong (in contrast to Newcastle University and U.N.E.) this issue appears to have been disregarded or, at least, regarded as insignificant.

The N.S.W. Department of Education and Teacher Supply

Academic staff in each of the three universities were aware that the N.S.W. Department of Education wanted to maintain a consistent supply of teachers. If incorporation of colleges within universities took place, the latter would become closely linked with one particular employer - the N.S.W. State Government, A consequence could be that enrolments in the proposed or extant faculties of education would depend on governmental policy which would fluctuate according to the demand for teachers and current political pressures. Another possible consequence of incorporation was that the N.S.W. Department of Education could find it necessary to re-open a teachers' college in order to maintain a supply of teachers since there was a wastage of approximately 30% of teacher trainees from universities compared with 10% from colleges.9

Professional Teacher Training Considerations

It was generally conceded in each university that the major rationale for and objective of affiliation and/or incorporation should be improvement in teacher training. In the documents, the amount and depth of argument on this issue outweighed any other. The professors of education at Newcastle University and U.N.E. and the principals of the then

Teachers' Colleges were all agreed that in some respects, at least, teacher training could benefit from incorporation. However, views on this issue were not unanimous among academics generally, faculties or departments of education and teachers' college staffs.

Academic Standards

In its Fifth Report of 1972, the Universities Commission (A.U.C. as it then was) stated that it would offer no objection to amalgamation providing teachers' college students were qualified to enter university, that college staff were acceptable as university academic staff and that college courses were equivalent to those in universities.

There was some discussion in each university on whether college students possessed adequate qualifications for university entrance. The U.N.E. Vice-Chancellor said that about two-thirds of the students who entered the Armidale Teachers' College in 1971 had a university matriculation.10 In Wollongong the calibre of Teachers' College students did not appear to be regarded as a problem either by the Joint University/Teachers' College Merger Committee or the Dougherty Committee, established in 1973 by the N.S.W. Minister for Education to consider the future relationship of the University and Teachers College in that city. At Newcastle Teachers' College in 1972 about 30% of the students had less than the normal aggregate marks at the higher school certificate; of these students the majority were enrolled in industrial arts, and their incorporation was not anticipated.11

Arguments concerning the absorption of college staffs cannot be understood without reference to previous events at Bathurst and Wagga Wagga. With the declaration of Mitchell and Riverina C.A.E.'s in 1970 and 1971 respectively, Bathurst and Wagga Wagga Teachers' Colleges ceased to exist and the staffs of those teachers' colleges were given no guarantee of permanent employment in the new C.A.E.'s. Political repercussions from the Bathurst and Wagga staffs 'spill' resulted in a constraint on what could be proposed regarding staffs at Newcastle, Armidale and Wollongong; henceforth, the entire academic staffs of teachers' colleges would have to be assured of their tenure. status and salary, Policy makers within and outside universities had learned this prior to, or during, discussions on university/teachers' college relationships. One opinion held within each university was that the transfer of college staff in toto to the university would result in a dilution of academic standards because the staffs of the neighbouring teachers' colleges did not, in general, have the academic qualifications required of a university lecturer. In Armidale, the major difficulty in incorporating college staff within the university was seen to be in the devising of some formula to ensure the incorporation of inadequately qualified staff in such a way that their status, their

promotional opportunities and their conditions of employment would not be adversely affected and which would, at the same time, enable the university to adhere to nationally recognised staffing policies.12 In 1971, 15 of the 53 Wollongong Teachers' College staff had higher degrees as opposed to 64 of the 88 University staff.13 It was recognised that many Wollongong Teachers' College staff received considerably higher salaries than university staff received with equivalent academic qualifications and that these teachers' college staff would resist salary reduction. However, it was also recognised that if, on incorporation, teachers' college staff were to receive higher salaries than university staff with equal or higher academic qualifications, the latter would resent it. In Wollongong the problem of absorption of teachers' college staff was seen to be acute since the then University College would not gain autonomy until January 1975 and had yet to establish its own reputation with pre-existing Australian and international universities. The three Vice-Chancellors did not view the incorporation of C.A.E. staff as an insurmountable problem. There appeared to be no formal protest from the Newcastle University Department of Education concerning the incorporation of college staff although some staff within that department dissented. At U.N.E. the Professor of Education, Bill Walker, supported their incorporation and the Faculty of Education stated that it 'would welcome them as colleagues'.14

In each of the three universities accreditation and absorption of the existing college courses was seen as a problem: some were viewed as clearly unacceptable while others needed examination before making a decision on their accreditation. Nevertheless, this problem appeared to have been regarded as an issue which could be resolved during subsequent merger negotiations.

Finance

In U.N.E. and Newcastle University it was felt that since teacher education was a relatively low cost activity, more involvement in teacher education would be financially beneficial providing the Universities Commission maintained its recurrent fund arrangements. However, one fear expressed in Wollongong was that if merger occurred, increases in funds might not be made available, a possible rationale being that merger should result in economies of the use of resources.

Site Planning

The Colleges at Newcastle and Wollongong are located next to the universities. Site planning was one factor which led to incorporation proposals at Wollongong. The view that merger proposals were a thinly veiled excuse to gain more land for the university was baldly stated in a report of informal conversations at an annual general meeting of FAUSA:

The Wollongong University College wishes to incorporate the Teachers' College because the University College needs the site for reasonable expansion. In exchange for the site, the College is willing to take over all the training of secondary teachers but wishes primary teachers to be trained in a new teachers' college on a separate site. 15

The Balance of Disciplines

It was feared that if the colleges were incorporated into the faculty or departments of education in the universities, then teacher trainee scholarship holders would enrol almost exclusively in that faculty or department instead of in the faculties of arts and science in which, traditionally, large numbers of teacher trainees enrolled. The impact on the existing balance of disciplines within a university that such a large faculty or department of education would have, caused considerable concern.

Academic Government

In each university there was some discussion of several possible arrangements for linking the teachers' college with the university. These arrangements included an association through an Institute of education based on the English model. At Newcastle University the point was made that if the Institute of Education model was adopted then the university department of education would be placed in an invidious position if it were responsible to both the University Council and the proposed institute of education. Another consideration raised at Newcastle University was that the proposed enlarged faculty of education would be entitled to approximately 12 full professors and 13 seats on the academic governing body (Senate). This addition to the then current entitlement of the Faculty of Arts would radically alter the Senate.16 in Wollongong, it was felt that the incorporated teachers' college staff could, on the basis of common interests, act as one group in the academic assembly and thus strongly influence university policy.17 Considerations relating to academic government do not appear to have been significant in U.N.E. discussions on incorporation proposals.

* * *

As noted above, the arguments and issues discussed by academics were not the sole influence on either the initiation or process of merger policy making. Similarly, current 1977 discussion within universities is only part of the policy making process on amalgamation. The merger issue has been rejuvenated by the reports of the Universities Commission and the Commission on Advanced Education for the 1977-1979 triennium which recommended re-consideration of amalgamation at Armidale and Wollongong. In response to those reports the N.S.W. Higher Education Authority wrote in November 1976 to U.N.E., the Armidale C.A.E., and a number of tertiary institutions in other parts of the State. In the letter to the U.N.E. Council

the Board said that in view of the attitude of the two Commissions and the Board's desire to effect an appropriate rationalization of tertiary education facilities in Armidale, it invited the Council to reconsider the question of the most desirable form of association between the University and the College."

As a consequence of such letters, merger discussions are once more taking place within universities at Armidale, Newcastle and Wollongong. (Merger debates are not confined to N.S.W.; in Queensland a possible amalgamation of Townsville C.A.E. and the James Cook University has been considered.²⁰)

The arguments and issues discussed by academics which are outlined above were raised during a particular national economic climate when there were expectations of expanding numbers of tertiary students. Since then, the economic climate has changed considerably and so have predictions of future tertiary student numbers.²¹ Student expectations and demands for courses are also changing. If these new conditions are incorporated by academics in their appreciation of the current situation their views of the arguments and issues on merger could well differ from those recounted here.

REFERENCES

- These institutions were:
 The Armidale Teachers' College now Armidale College of Advanced Education (C.A.E.);
 The University of New England (U.N.E.);
 The Newcastle Teachers' College now Newcastle C.A.E.;
 The University of Newcastle;
 The Wollongong Teachers' College now Wollongong Institute of Education.
- 2. Armidale Express, 16th August, 1971.

- L. N. Short, 'Universities and colleges: variations on a theme' in Universities and Colleges of Advanced Education speech notes from a seminar conducted by Convocation of the University of Newcastle on 10th March, 1972. The University of Newcastle Research Associates.
- 4. U.N.E., Professorial Board (P.B.), source book, 6752-6758.
- L. N. Short, Development of teacher education, 19th June, 1971, Newcastle University documents.
- Alec Lazenby, Some academic advantages of the University of New England/Armidale Teachers' College incorporation, 17th July, 1972, U.N.E., Council, source book, 17,579.
- Cf. N.S.W. Parliament, Report of the Committee of inquiry into teacher education (Chairman: Dr. H. F. Bell) Parliamentary Paper no. 48, September 1971, pp. 12, 35, 51.
- 8. U.N.E., P.B., 6755
- 9. Cf. The Bell Report, op. cit.
- 10. U.N.E. P.B., minute book, 2004.
- G. H. Duncan (Principal of Newcastle Teachers' College), Submission to the Senate Committee of the University of Newcastle appointed to consider a proposal to incorporate Newcastle Teachers' College within the University, 9th February 1972. Newcastle University documents.
- 12. U.N.E., Faculty of Education, P.B., source book 6761.
- John Steinke, statement to the Wollongong University College/Wollongong Teachers' College Joint Working Party, 10th March 1972.
- 14. U.N.E., P.B., 6749, 6761.
- U.N.E., Staff Association (U.N.E.T.A.) documents U.N.E.T.A. allowed me to read some of their documents relating to merger for the purpose of an M.A. thesis, N.S.W. Universities and Teachers' Colleges: some merger proposals 1969-1975, W. E. Gibson, U.N.E., 1976. (Publication forthcoming)
- Newcastle University, Joint Council/Senate Committee established to advise on merger, minutes. 11th August, 1972; J. M. Lee, Submission to the Joint Council/Senate Committee, 7th February, 1972.
- Wollongong University College, Department of Geography statement to the Wollongong University College Secretary, 26th October, 1973.
- Australia, Commission on Advanced Education, 1977-79 Report, (Chairman: E. S. Swinburne), Canberra, 1976, 4.22, p. 18.
 Australia, Universities Commission, Report for the 1977-79 triennium, (Chairman: P. Karmel), Canberra, 1976, 6.35, p. 83.
- 19 U.N.E., P.B., Business paper, 21st February 1977, pp. 2, 3.
- Australia, Universities Commission, Report, op. cit., 6.34; and Townsville C.A.E., Report of the special committee on amalgamation. Townsville, 1976, unpublished.
- Australia, Parliament, Population and Australia. A demographic analysis and projection, Report of national population inquiry (Chairman: W. D. Borrie) Canberra, 1965, 9.59-9, vol. 1, pp. 390-398.

THE PRODUCTIVITY OF UNIVERSITY RESEARCH

Carmel Maguire
Associate Professor,
School of Librarianship,
University of New South Wales.

Robin Kench
Research Assistant,
School of Librarianship,
University of New South Wales.

The value of university research tends to be taken for granted by those who pursue it. Researchers readily accept the view which has twice been advanced in Reports of the Universities Commission, namely that:

Research is an essential activity of a university ... the extension of knowledge is at the very heart of university work; indeed learning can only be experienced at the higher levels if the minds of students are stretched at its frontiers. Accordingly there is little need to justify the role that research plays in universities or the allocation of funds for research purposes.'

The Commission's complacency was in fact short-lived. In the August 1975 federal budget, the Government proposed cuts in research expenditure. A change of Government has not changed the economic climate in which universities have to justify their needs for funds for research as for all other purposes. Indeed if the traditional respect paid to research and researchers in universities is to survive, more attention may have to be paid than ever before to the productivity of university research.

Australian universities are very dependent on Government for research funds. The Universities Commission has produced figures which show that of the total research expenditure of \$28.5 m in 1973 by universities other than the Australian National University, 77.5% came from Government sources.² The OECD Examiners found the level of Australian research funding low and offered the following advice as a basis for improvement:

Since the normal way of financing universities' recurrent expenditure allows just a relatively small part for research work, ways have to be found by which the prevailing situation might be improved. To ask for more money is certainly the easiest way, but it will have success only when the Government as well as the Parliament are convinced —

- (a) that the money is needed for purposes worthy of additional funding:
- (b) that every other way to achieve greater efficiency in using available funds and means has been tried.³

The OECD Examiners' advice thus seems to suggest that analysis of both inputs and outputs of university research ought to form the basis of submissions to Government.

Input/Output Measures

The development of measures of research input on a national scale has been relatively recent in Aust-

ralia. The Department of Science is continuing the work begun by the Department of Education and Science on a national inventory of resources devoted to R & D as part of Project SCORE. The first inventory covered the year 1968/1969 and another has been prepared for 1973/1974. Research inputs are more amenable to measurement than outputs but there are difficulties. How, for example, is the cost of unsuccessful research to be allocated? Should it be charged to the final cost of a successful research effort, regardless of whether the previous research was carried out by the same people, or in another department, or in another university? and regardless of whether previous research made any contribution to the successful project? Research sponsors have been known to be disappointed, not to say suspicious to the point of litigation, when work they have funded has proved unproductive while work done under other auspices on the same problems has proved successful. Measurement of the totality of research inputs must therefore be recognized as at least

While efforts like Project SCORE are important in contributing overall information on research inputs. there have been suggestions other than those of the OECD Examiners that responsibility for the efficient management of research resources lies with the researchers themselves. An Australian professor has recently observed that "the academic staff are the key people in determining the productivity in research. They are subject to a number of constraints and must optimise within those constraints".4 The authors can offer no certain prescription for optimisation of scarce research resources. They can only observe that optimisation of time and effort is likely to be difficult in many Australian university departments where researchers combine heavy teaching loads with research commitments and where there is a high degree of uncertainty about future funding. Perhaps optimisation is rather to be sought in the choice of projects and in allocation of funds to competing projects. Implicit in this suggestion is of course the assumption that there are valid measures of research output which can be applied to individuals and to projects.

Whether the outputs of university research can be measured can be examined in relation to the achievements often claimed or at least assumed to result from it. These are (1) additions to knowledge; (2) improvements in university teaching; and (3) improvements in the life of the community generally.