Department of Employment, Education, Training and Youth Affairs

The 'Colleges': Growth and Diversity in the Non-university Tertiary Studies Sector (1965–1974)

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Educational Outcomes Research Unit The University of Melbourne

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Preface

This paper reports the findings of a research study, titled 'Extracting Data on Colleges of Advanced Education Students Prior to 1974'. This project was commissioned and funded by the Evaluations and Investigations Program of the Higher Education Division of the Department of Employment, Education, Training and Youth Affairs. Its purpose was to collect data on student enrolments in the former colleges of advanced education for the period 1965 to 1973—the period during which federal involvement in the administration and funding of this sector became steadily greater.

The project was carried out in 1997 by the Educational Outcomes Research Unit, located in the Department of Education Policy and Management in The University of Melbourne.

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Particular thanks are also extended to the librarians, archivists, student administration officers, historians and other officers of universities, education departments and state libraries across the nation who so willingly shared their knowledge of the college of advanced education (CAE) sector during the 1960s and 1970s and who went to great lengths to discover statistical and historical information of value to the project.

All responsibility for the management of data and for the interpretations and conclusions set out in this report rests with the authors.

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Introduction and Methodology

Background

This project was commissioned by the Evaluations and Investigations Program of the Higher Education Division of the Department of Employment, Education, Training and Youth Affairs (DEETYA). Its purpose was to collect data on student enrolments in the former colleges of advanced education for the period 1965 to 1973, and to integrate these data with existing DEETYA time series tables. The project was carried out by the Educational Outcomes Research Unit, located in the Department of Education Policy and Management in The University of Melbourne.

Structure of the Report

The report begins with a methodology chapter (Introduction and Methodology) which outlines the methods used in collecting, collating and organising the data. Chapter 2 (Historical Overview) provides a brief overview of the colleges of advanced education and teacher education colleges and places their development in an historical context.

An analysis of the data follows in Chapter 3, comparing project data with Commonwealth Bureau of Census and Statistics (CBCS) figures (where they are available) nationally and state by state. Chapter 3 also seeks to establish principles for integrating data on CAE student enrolments with existing DEETYA higher education numbers.

In the three appendices following, a list of sources and references used is provided, as well as a list of the relevant Commonwealth Acts of Parliament and an example of the letters used to request data from the institutions.

Finally, in Appendix 4, statistical tables and charts outlining enrolments in colleges of advanced education and teacher education colleges on a state by state and national basis are provided. Enrolments in individual colleges are provided in a separate statistical volume (College Statistics), available upon request.

Methodology—Historical Aspect

Names and addresses of institutions granted college of advanced education (CAE) status by 1979 were obtained from the Department of Employment, Education, Training and Youth Affairs and used as a starting point in the construction of a list of non-university institutions offering tertiary-level courses during the specified period. These, however, presented only a very small part of the whole picture of non-university institutions in existence during this time. Name changes, changing

definitions of what constituted a college of advanced education (in addition to differences of definition between states) and amalgamations between institutions, closures of some colleges and the birth of others during a nine-year period of expansion and significant policy changes all contributed further to the challenges faced by the researchers in recreating the history of this sector.

Some institutions, for example, opened only in the final of the reference years, others were taken over by larger institutions during the reference period, and others still joined together to form new bodies.

The question of whether an institution merited the appellation of college of advanced education was a further difficulty, but one which was largely side-stepped by the decision to include all institutions offering courses at diploma level and above. Receipt of federal funding as a criterion for definition was not helpful. The South Australian Institute of Technology is the only non-university institution listed under Commonwealth legislation as receiving funding for its student load in 1965 and 1966, and this was under the existing universities legislation. In addition, a handful of colleges—Western Australian Institute of Technology, NSW Institute of Technology, Royal Melbourne Institute of Technology, Ballarat College of Advanced Education, Bendigo College of Advanced Education, Gordon College of Advanced Education, Queensland Institute of Technology (Brisbane), Queensland Institute of Technology (Capricornia) and the WA School of Mines—were in receipt of capital works funding (under the 1965 *Advanced Education Act*) in that year.

With these exceptions noted, most of the colleges did not begin to receive recurrent student load funding until 1967, when the 1966 *Advanced Education Act* (legislating for the 1967–1969 period) took effect. A process involving the Commonwealth and the relevant state accreditation authority (e.g. Victoria Institute of Colleges, NSW Advanced Education Board, Queensland Board of Advanced Education, etc.) then determined when additional colleges were added to the list receiving funding. In the case of the teachers' colleges, which were run by the state education departments, this was not until 1973, when they were finally awarded CAE status and the accompanying recurrent funding from the Commonwealth.

Data on the histories of colleges were also sought from reference books, from the current institutions which incorporated the colleges and from various state education bureaucracies. The compilation of all this material resulted in the historical summaries presented in the data section in Appendix 4, detailing years of existence, receipt of federal funding and any name changes.

Methodology—Enrolment Data

Despite the differences in status which history accorded this diverse collection of institutions at different times during the relevant time-frame, data was sought on tertiary-level enrolments for all colleges in existence at any time between 1965 and 1973. These numbered a total of 101 institutions, including new colleges formed from a number of pre-existing colleges, e.g. in Victoria, Lincoln Institute and its predecessors, the School of Physiotherapy, the Occupational Therapy School, the School of Speech Science, are counted as four separate institutions for this purpose.

This figure of 101 colleges excludes a small number of private institutions which may have been in existence during the reference period—e.g. Mercer College, a small private teachers' college in Melbourne used to train teachers for independent schools. Such institutions have been excluded because no records for the institutions themselves or their enrolments can be traced, a factor probably arising from the fact that they were not obliged to report to any government agency. Overall, however, national enrolments in private teachers' colleges were available from 1968 onwards and are included in the national figures for student enrolments in teachers' colleges (see Appendix 4).

In general, however, private students (i.e. fee-paying students in approved courses or non-approved courses) at the public institutions have been included in the project data wherever possible, since they too form part of the student body enrolled in non-university tertiary education at the time.

Data for these 101 colleges of advanced education were sought concurrently from a number of sources. Given that published statistics, in the form of annual reports, were likely to be the most accessible form of data, a letter was sent to the library of every current institution linked to a former college of advanced education, requesting all available data. In many cases, these letters were passed on to the institutions' archivists or data management officers. Data forthcoming from these sources in the form of summary tables, annual reports and minutes of meetings contributed significantly to the collection of data.

Simultaneously, data were sought from publications published by state and federal agencies, such as the Commonwealth Bureau of Census and Statistics, state departments of education and organisations, such as the NSW Board of Advanced Education and Victoria Institute of Colleges—organisations which were responsible for the administration of the advanced education sector during the relevant period.

State education department publications in particular proved a rich mine of data, especially on teacher training institutions and some of the smaller, state-controlled colleges, such as the School of Art in South Australia. Education departments in Western Australia, South Australia, Victoria, New South Wales and Queensland all supplied data published in annual reports.

Because of the passage of time and because some of these organisations no longer exist, however, many of the statistical reports containing student enrolment information were not easily accessible. Where this was the case, public libraries in each capital city proved a valuable source of data, carrying reports by the bodies responsible for colleges of advanced education, as well as state education department reports and, in some cases, annual reports from individual institutions. Public libraries in Melbourne, Sydney, Brisbane and Adelaide were all visited to collect data.

Visits to individual institutions' archives proved to be the least effective means of data collection. Archives in a number of Victorian institutions were searched, with little to show for considerable effort expended. It would not be inaccurate to say that archives in many of these institutions were poorly kept (where they were kept at all) and difficult to access efficiently. In some amalgamated institutions, the whereabouts of data relating to a particular component college were not known at all. Where data were available, they rarely provided the level of detail sought by the research team.

Statewide and national aggregates are included in Appendix 4 of this report, but these have only been produced for total enrolment numbers, since missing data in the commencing, gender, full-time/part-time and field of study categories do not allow accurate aggregation at these levels. Charts which illustrate enrolment trends on a state by state and national basis are also provided in this section.

It should be noted that the national and statewide aggregates reported in Appendix 4 of this report refer to data collected and collated by the project team. These figures attempt to report all tertiary-level activity in the non-university sector during the specified years. This is also the case for the individual college data reported in the separate College Statistics volume.

However, these data are different in some cases from the aggregated CBCS data which are available from 1968 onwards.

The data used for integration with the existing DEETYA time series tables and that which appear in Figure 2.2 in the following chapter are a combination of project and CBCS data. A full explanation of the basis on which decisions regarding selection of data were made may be found in Chapter 3.

Historical Overview Revisiting The Martin Report

Higher education in Australia displays less structural diversity today than most of the advanced member countries of the Organization for Economic Co-operation and Development. In the United States, two-year community colleges grew out from high schools to provide much of the post-war expansion in American higher education and consolidated the identity of four-year institutions and the professional schools arising on this base. In the United Kingdom, until the early 1990s, higher education was divided into universities (with their own hierarchies) and polytechnics. Germany retains its system of universities, including technical universities, its higher professional schools for art, music and teacher training (hochschulen) and other university-level institutions, in addition to the vocational training colleges (fachhochschulen) created in 1970. In France, higher education includes universities, the autonomous institutes of technology, the grandes écoles for engineering and business (along with their preparatory schools), and the two-year post-baccalaureat advanced technical sections in senior high schools.

The trend to a structurally simpler system of higher education in Australia—which by no means implies uniformity amongst institutions—began in the mid-1960s, following the report of the committee on *Tertiary Education in Australia* (Martin Report, 1964–1965). By that time, universities had been brought more fully under the influence of the Commonwealth government through the funding and planning utility of the Australian Universities Commission. There was a general recognition that universities were that part of the educational infrastructure of Australia which was definitely national in character. For their role in the preparation of professional and managerial elites—though far from exclusive—was undeniable, and leadership in business, government and the professions transcended the boundaries of the Australian states. Notwithstanding the division of responsibilities under the Constitution assigning education to the States, the Commonwealth thus saw an unwritten mandate for intervening in higher education, and one which the Second World War and emergency powers had simply brought forward.

But at other levels of education, matters were more complex. Broadly speaking, the clearer the perceived *national* implications of a particular field or form of education, the more the Commonwealth could claim a legitimate, if not legal right of involvement. Failure to employ the resources to which it had legally validated access under High Court decisions could have had the effect of weakening national economic and social well-being. This principle of national significance seemed to matter most with respect to universities—which, moreover, were recognised conduits of *international* exchange—and least in the case of schools, where the particularism of the states was most complete. However, even here Commonwealth governments could appeal to the national principle and did so—first, because of a perception that there were certain categories of schools upon which universities traditionally depended (private schools were in effect the first

establishments to receive aid through taxation expenditure), then because state and Catholic authorities were unable to sustain mass systems of schooling unaided.

Advanced Technical Education

Between universities and schools lay the most diverse and in some ways the least visible field of education—technical training. At its highest levels, technical training intruded into the sphere of universities, above all in engineering, and at its initial levels it formed a sometimes major part of school education, as in Victoria and also in South Australia. So its institutional boundaries were not clearly drawn. But the relative obscurity of technical training as a sector was also due to low prestige. Secondary schools, operating on the traditional model of feeder establishments for universities, enjoyed a high public profile. For it was through them that medical and law schools in universities were reached and in turn the private-income professions to which these led. Universities enjoyed the prestige of training for the professions, but were also the repositories of higher learning and of advanced scientific culture more generally. Technical education lay off the route. And this had implications not only for the esteem in which it was held, but for the social groups who turned to it and relied upon it.

In the early 1960s, advanced technical education—insofar as it was not conducted in universities—lay under the control of state education departments (for contemporary discussions, see Moorhouse 1964, Wood 1965, Tylee 1965, Evans 1965, Ford 1965). It is characteristic of the growth of Commonwealth involvement in education that the fields which received its earliest attentions were those that were most remote from the direct administrative controls of the states. This applied to universities—which were incorporated under state legislation and substantially funded by state governments, but were largely autonomous—and to private schools—which were also regulated by state parliaments and from the early 1960s funded by state governments, but not administered by them.

Technical education was organised basically as a department of state administration—rather than a sector of autonomous institutions—because it was a major mechanism for governments to assist business and industry. Even though some of the higher technical institutes, such as the Royal Melbourne Institute of Technology, were council-controlled, they were also mainly funded by state governments. Technical colleges were in short instruments for supplying training funds to private and public enterprises and for organising much of the training effort required by these firms.

In hindsight it can be seen that the commissioning of a review of the whole of 'tertiary education' along the lines already taken with respect to universities (Murray report 1957) represented a decision to extend a particular model of the national training effort in which industry relied on taxation revenue and government-organised services. The question was not who should pay—taxpayer, employer, employee—but the level of access to taxation income (federal rather than state) and the planning and expenditure mechanisms that would give the sector strong influence over the setting of priorities. On this interpretation, the

significance of the Martin committee was not the shift in control over technical education from state to Commonwealth as such, but the broadening of the public revenue base for industry training and the consolidation of public institutions as the key training providers.

An essential step along this path was the cession of direct administrative controls by state authorities over the delivery of advanced technical education, and the Martin committee sought to achieve this through the establishment of institutes of colleges in all states. Another step was the creation of a consultative and planning agency at the national level which would allow the training sector and its stakeholders an important measure of freedom from direct administrative controls exercised by the Commonwealth on the basis of *its* funding powers. In the event, the committee did not have its way, though the Commonwealth did appoint an advisory committee—the Commonwealth Advisory Committee on Advanced Education, 1965, and later the Commission on Advanced Education in 1971 (Smart 1982, p. 23).

The system of public funding and coordination and control through public authorities as proposed for advanced technical education owed much to the model which by then had been established for university education, though there were differences, notably the state-level institutes. The significance of this modelling can be considered in the context of how the Martin committee distinguished between technical education and university education. 'The principal objective of the technical colleges', the committee stated, 'is to equip men and women for the practical world of industry' (*Tertiary Education in Australia*, I, p. 127). Universities, on the other hand, emphasise the 'development of knowledge and the importance of research in the progress of human understanding' (I, p. 128). Technical education was about learning how 'manufacturing and business are carried on and the fundamental rules which govern their successful operation' (I, p. 165). To universities, any information produced by research which had practical applications was really 'incidental to the main objective'. For this was to enlarge the theoretical basis of our knowledge, to discover fundamental principles.

Even though, therefore, technical education aimed to provide direct benefits to industry and workers in the form of utilisable skills and production or service processes, both its funding and its organisation were to follow the direction established for universities, whose outputs were theoretical knowledge and educated and cultured men and women. This approach would pave the way to the eventual assimilation of advanced technical education to universities. For the training sector at its most advanced levels was being taken down the road towards a global reliance on the sources of funding and the resource allocation mechanisms which applied to universities. Business and industry were content to displace the costs of higher-level training and research applications onto a publicly-funded system, relying on the accreditation powers of professional bodies to assure appropriate curricula and on political influence to achieve adequate funding.

It was not only because the Martin committee saw resource requirements to be so large that it wanted to shift technical education to a national and public funding base, coordinated by public agencies. There was a prestige problem as well. And

this was causing distortions in both technical education and university education. The technical colleges were not receiving the kinds of students which a proper estimation of the economic importance of vocational training would imply, while universities received many students who did not have the requisite ability or the theoretical application. Failure rates in commerce faculties were a telling illustration of the mismatch based on ignorance and even snobbery. Raising the status of technical education was a major objective, and the committee set out specific lines of action to achieve this: expel recreational, trade and most certificate courses from the sector; create good employment conditions to attract wellqualified staff; give more attention to the humanities; improve social amenities for students; encourage two-way transfer between colleges and universities; and foster a sense of challenge to meet national standards (I, pp 127, 165–166). Both resources and quality thus required an approach which at every turn pointed to how universities worked best—environments for learning, staff qualifications, 'general education', and standards based on institutional emulation (organised through the proposed institutes).

Even though the reference points were, in the view of the committee, fundamentally different—one sector training to produce economic wealth, the other educating 'those intellectually capable of reaching the boundaries of knowledge' (I, p. 149)—the same road was to be taken. Before turning to the consequences of this approach, the other main sector of reform tackled by the committee—teacher training—should be considered. For eventually this sector would also be brought within the model of funding and coordination developed for universities.

Teacher Training

At the conclusion of the Second World War there had existed only seven teachers' colleges across Australia. By 1962, there were four times as many, and teacher training courses were also offered by universities in every state (five in New South Wales/Australian Capital Territory and two in Victoria). Formal entry levels were variable—for primary teaching, half the states required Year 11, while the other half demanded Year 12—but in practice 80 per cent of students were at university entrance levels (I, p. 107). Secondary teachers had traditionally been trained in universities, but the post-war 'baby boom' and rising retention led to the opening of secondary training courses in teachers' colleges. The quality of these had been criticised, the committee noted, but given grave shortages of qualified teachers, it was likely that non-degree courses for secondary teachers would be maintained (I, p. 109).

Criticism of teachers' college courses could not be applied to the quality of candidates. Students beginning training courses in the early 1960s were academically a well-qualified group. As the Martin committee noted, they were mostly drawn from the upper half of candidates for final year exams (I, p. 111) (see Figure 2.1). None were in the band representing the lowest 40 per cent of candidates, and most (around 60 per cent) were in the band representing the top 20 per cent. This was based on the fact that most students entering teachers' colleges

were on departmental studentships, a form of competitive scholarship which included a living allowance, but also an employment bond.

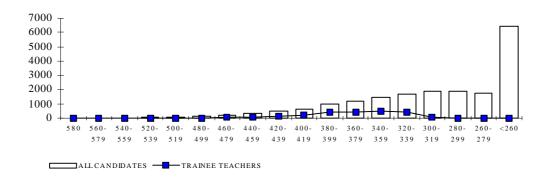


Figure 2.1 Aggregate Marks of Teachers' College Entrants Compared to All Candidates in 1962 in One Australian State

Source: Martin Report, Vol. 1, p. 112, Table 84.

To the colleges sector of teacher training, the committee's approach was very similar in philosophy and in form to its approach to advanced technical education. It argued for removing teacher training from the control of state education departments, for establishing autonomous colleges, and for creating boards of teacher education in each state. These were to control teacher training: granting certificates to students completing their courses, advising on resources and development, reviewing courses and staffing, advising on the granting of autonomy to colleges reaching an appropriate standard, and admitting colleges to board membership (I, p. 111). It was envisaged that the boards might eventually be authorised to award professional degrees.

The proposal to consolidate autonomous teachers' colleges linked through membership of an accrediting board was argued on the basis of quality. The outlook of teachers as professionals rested, the committee claimed, on the nature of the institutions in which they were trained. If training institutions were autonomous and adequately resourced, they would attract well-qualified staff, who in turn would impart to students dispositions which were truly professional. Quality would be difficult to achieve while students were tied as future employees to state education departments, whose staff were equally employees (I, p. 122).

There would be a further advantage. The teachers' colleges, having acquired their freedom, could introduce courses other than for teacher training and so gravitate towards 'college(s) of arts and science' (I, p.123).

The Rationale for a University Model of Technical Education and Teacher Training

Basically the same argument applied to teacher training as to advanced technical education. The level of control exerted by state authorities was incompatible with the pursuit of quality because professionals were not free to regulate their own affairs through independent boards or institutes and because the nature of the

funding link (bureaucratic authority) was in any case inadequate to deliver the resources needed for quality. Both sectors were judged on the level of quality which could be asserted through autonomous professional control (self-regulation), and this in turn was made to rest on public funding at a national level. In each case, the perspective from within which reorganisation was proposed was derived from university culture. Autonomy ensured the free pursuit of standards. These were binding on all institutions through corporate association (institutes, boards). The role of government was to provide the funds and anchor the status of the regulatory institutions in public law. It did not matter whether the mission of technical education was to boost the skills base of industry and the technical and business effectiveness of its processes or that the purpose of teacher training was to boost the skills of teachers and the learning of students for whom departments of education were accountable. The orientation was towards a professionalism founded on the pursuit of learning for its own sake and enshrined in the corporate or guild status of the university.

The university model on which the Martin committee proposed the reorganisation of technical education and teacher training carried with it significant dangers. First, there was a risk of driving an institutional divide between technical education and its industry and labour clients. Neither employers nor employees would contribute substantially to the costs of advanced technical education, even though business and industry and skilled workers upgrading their skills were its direct beneficiaries. The lack of a funding link meant that technical education could evolve in the direction set by independent institutions, acting under the corporate umbrella of institutes, and driven by strategic institutional objectives as well as by professional values and status (e.g. raising of entry standards for the engineering profession or for accounting professionals).

Similarly, the reforms proposed for teacher training—which were not accepted by the Commonwealth government—would also have allowed institutions to drift from the training needs of employing authorities and practicing teachers. For the proposed boards of education were guarantors of institutional autonomy, and though they were envisaged as initially being led by senior education officers in the States, the ultimate goal was to use them to enable the profession to develop its own standards free of employer constraints.

What the committee overlooked was that employers were a crucial, if far from perfect link, between the diversity of students found in classrooms and the universal values which animated the profession. Moreover, would it really have been practicing teachers whose experience and insights inspired the activities of the boards or the notables of education who were administrators, academics and retired headmasters?

Growth of the System of Advanced Education and Funding Pressures

The reforms arising from the Martin committee's work undoubtedly laid the basis for the major expansion in tertiary education which would occur in subsequent decades. Figure 2.2 shows that the reorganisation of tertiary education as implemented by the Commonwealth government during the 1960s underpinned the first great wave of growth in higher education over the post-war period.

The expansion of the system of technical colleges and teachers' colleges into an advanced education sector accommodated much of the growth in higher education in the second great period of growth (from the early 1980s). Between 1975 and 1985 the share of total student load carried by the advanced education sector rose from 45 per cent to 63 per cent (see Figure 2.3).

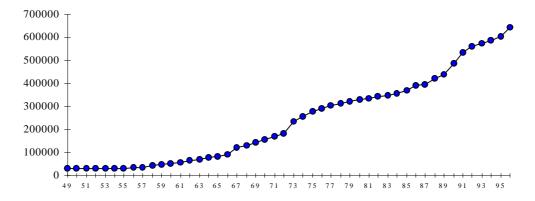


Figure 2.2 Growth in Australian Higher Education, 1949–1996—Total Student Numbers

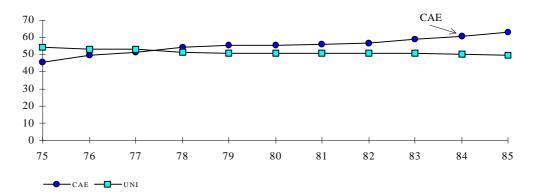


Figure 2.3 Shares of Total Student Load in Higher Education, 1975–1985, by Sector

Source: National Report on Australia's Higher Education Sector, p. 15

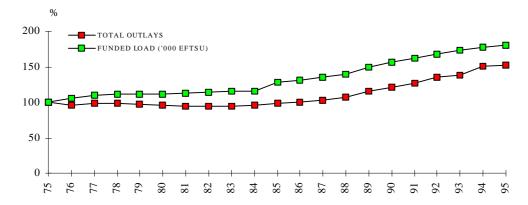


Figure 2.4 Commonwealth Expenditure on Higher Education, 1975–1995 (Indexed Growth, 1975=100)

As demand for higher education rose in the 1980s, the costs of maintaining and developing the binary system as it had come to evolve placed increasing stress on Commonwealth budgets. While the mid-1970s up to the early 1980s saw declines in total outlays on higher education and only small increases in funded load, the picture began to change in 1985 when substantial and continuous growth began (see Figure 2.4). It was against this background of mounting pressures which were difficult to sustain without impairing other programs that the pace of institutional amalgamations was quickened, the Higher Education Contribution Scheme was introduced, and the binary system abolished in favour of the unified national system of Australian universities. The establishment of this integrated system was prepared not simply by an earlier phase of mergers sponsored by government, but by the long-term process of expanding the advanced education sector on the university model of public funding, institutional autonomy, and national coordination.

A Retrospect from the 'Nineties

While gains into the 1990s as measured by participation rates mean that many more individuals are taking up higher education opportunities, it is worth returning to the underlying purposes of the Martin committee recommendations to consider whether this fact in itself has warranted the greatly increased public outlays on the system.

Advanced technical education is now firmly within the precinct of universities. But this has come at the cost of severing institutional links between middle-level training—identified as certificate courses in the Martin report—and diploma and degree programs. While transfer functions were frequently stressed in higher education policy statements of the 1980s (Dawkins 1987; 1988), currently only about 8 per cent of all commencing students in higher education have completed or attempted a TAFE (technical and further education) award (DEETYA 1996). It was partly to raise the esteem of technical education and thus to improve the quality of the students undertaking it that the advanced sections of technical colleges were upgraded into institutes of technology. But the result has been that TAFE institutes now provide mainly skilled vocational and technical and paraprofessional training, with very limited activity at the diploma level. Esteem for

TAFE courses continues to be low by comparison with universities, and it is possible that this will remain so because advanced technological studies are not a natural progression within TAFE. By the mid-1980s, the professional stream in TAFE accounted for less than one half of one per cent of all students enrolled in vocational courses (CTEC 1987, p. 12). In Victoria in 1993, the figure was 0.3 (TAFE National Student Collection, unpublished data).

Conversely not all the growth which has occurred in universities can be regarded as unproblematic. Many undergraduates do not complete their courses—a problem which the Martin committee documented in depth. In 1990, many institutions reported continuation rates in science programs of below 80 per cent (DEETYA 1993, p. 372). In engineering, the proportion of undergraduates completing their studies was sometimes as low as 61 or 66 per cent. The lowest continuation rates were found in institutions which had acquired university status most recently, usually amalgamated colleges of advanced education. No doubt institutions such as the former Phillip Institute of Technology served populations which were more vulnerable to discontinuation because of economic and educational disadvantage. But is the best way to assist these individuals to include them within the pedagogical framework of universities and in effect to insist that the only path to advanced technical training is through large classes, assumed high levels of mathematical knowledge, poor student supervision, traditional assessment practice focussed on grading, and limited or no industry placement?

Even amongst students completing their degrees, there is sufficient dissatisfaction with vocational content for many to enrol in TAFE middle-level and professional programs upon graduation. It has been estimated that this reverse transfer runs at twice the rate of movement from the TAFE sector into university (see Golding 1995). The reported motives of university graduates transferring to the TAFE sector indicate that the long-term migration of advanced technical education from college to university is by no means unanimously considered a blessing. It appears that historically the lateral linkages between training and industry (often involving part-time study or in some cases block release) have been sacrificed to the vertical progression from school to university, based on graded assessment in theory-oriented mathematical and physical sciences (for the distinction between lateral and vertical linkages, see Clowes 1995, p. 10).

Similar concerns can be raised with respect to teacher training. If advanced technical education was viewed by the Martin committee as imparting the 'rules' of industrial and business success (rather than theoretical advancement and long-term growth in knowledge), the same can be said of teacher training. It is concerned with the most effective ways of improving student learning, and as reliance on successful schooling has become generalised through higher retention rates, the practical orientation towards outcomes has to be stronger, not weaker. This implies much greater inputs from schools and employing authorities, for it is they who are accountable for success and failure and who are responsible for the very diverse environments in which children seek to learn. Yet much of teacher training operates under the mantle of professorial divisions in which the key measures of output are research indicators. These may have no direct bearing on teaching and

learning functions in particular environments, but are oriented to historical progress in understanding and theory.

Important as this is, there is little to suggest that the professional culture and the institutional autonomy which (to the Martin committee) were basic to it have given teachers greater theoretical access to school environments and greater pedagogical command over outcomes. On the contrary, much of teacher training—especially at the secondary level—is based on the traditional academic assumption that the 'education' of the teacher through disciplined reflection and exposure to well-qualified academic staff will be efficacious. The autonomy of universities in fact blocks out the teaching profession and employing authorities and substitutes the cultivation of the person for the transmission of skills. When very few children reached senior secondary school, this approach had a certain historical congruence. But when most children complete school, it is an approach which is difficult to defend.

The weakness of the university model is only compounded by the declining status of the profession and the changing achievement and motivational profile of young people who do enter teacher training. While young people who contemplate entering teaching at the secondary level are generally more successful students as measured by Tertiary Entrance Rank, they will often not begin training until 4 or 5 years after completing school, if they do begin, and often have sufficiently high marks to turn to other more attractive options. Those who would like to do primary teaching, on the other hand, are usually much less successful students as measured by Tertiary Entrance Rank (see Figure 2.5) (for the source, see Teese *et al.* 1996). They will begin training immediately on leaving school and rely much more on teaching in default of other options. This does not imply that they will make poor teachers. But the purpose of the Martin committee in seeking to move teacher training into independent university-like institutions was to raise the quality of student intakes, not diminish it by basing selection into courses on the academic market principles of Tertiary Entrance Rank and cut-off score.

Conclusion

Structural diversity in Australian higher education has declined over the three decades since the creation and integration of a non-university sector into a unified system of universities. Institutional diversity has declined as well, only to re-appear under a different form, for the unified system imposes strong pressures to conform to standards of quality which are academic in nature. In this context, it is more difficult for institutions to direct their efforts according to the principles of structural differentiation. Increasingly universities are building bridges to industry, but the most common forms of institutional collaboration are with other educational institutions. To move outwards into the worlds of capital and labour and government and to create a different platform on which to base research and teaching is still very much a pioneering enterprise involving a slow change in academic culture. This is as true of advanced technical education in universities as it is of teacher training. Simply importing these activities into a university milieu by the mechanisms of raising entry standards and prolonging training to degree level

does not in itself assure a more satisfactory link with the worlds that professional training seeks to comprehend and to modify.

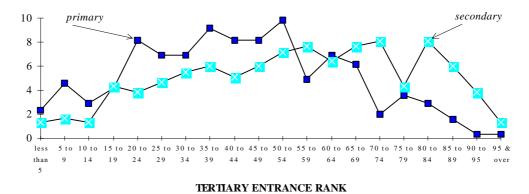


Figure 2.5 Tertiary Entrance Rank of Students who Would Like to Teach, by Level of Teaching

Universities tend to lock up against the external world through the internal principles of differentiation which define disciplines, constitute departments, and allocate professorial chairs. The process of exclusion acts against other sectors of education as well, most notably the vocational training system, which cannot be easily integrated into the hierarchy of graded education of which universities are the pinnacle. Characteristically the faculties other than clinical that have been slowest to establish credit transfer arrangements with the TAFE sector are arts and science, domains whose internal architecture of divisions and sub-divisions is most elaborate and whose prestige points of reference are more exclusively endogenous. Education faculties, too, are averse to connections with the TAFE sector because they are built on generic disciplines which emphasise the culture of persons and because they see in TAFE graduates only technicians.

The creation of colleges of advanced education during the 1960s represented an attempt to raise the quality of advanced technical education and teacher training without mistaking their purposes, while leaving universities free to pursue their distinctive mission. But the model of funding, national coordination and professional control towards which this enterprise worked tended in the end to transform technical education and teacher training into academic activities and to subordinate them to university logic. The creation of the unified national system acknowledged and consolidated this development. It left unanswered the questions of whether industry and the workforce were better served in the late 1980s than in the 1960s and whether the learning needs of children were being more effectively tackled. Outside of this system, there remains TAFE, the only sector that today represents structural diversity.

Integration of Data into Existing DEETYA Time Series

The purpose of this section is to reconcile the data collected by the project with aggregated enrolment data from published sources, such as the Commonwealth Bureau of Census and Statistics. In doing so, it seeks to establish principles for integrating data on CAE student enrolments with existing DEETYA higher education numbers, as published in the *Higher Education Students Time Series Tables* (1996).

Table 3.1 shows that significant discrepancies exist between the project-generated data and those available from the Commonwealth Bureau of Census and Statistics from 1968 onwards—i.e. over 8 600 in the year 1968. Figure 3.1 compares all tertiary enrolments in colleges of advanced education, as calculated using all project data, with tertiary enrolments in colleges of advanced education, as estimated from project data for legislatively recognised colleges of advanced education in 1967 and using CBCS data for 1968 to 1973.

Data for 1964 and 1974 are taken directly from the Higher Education Students Time Series Tables—1964 counts only university-level enrolments, while 1975 includes colleges of advanced education and teacher colleges. The first year which allows comparisons between CBCS data and project data is 1968. A discrepancy of over 8 600 has been noted. In 1969, a discrepancy of a similar magnitude (9 272) is noted.

Following this period, the discrepancy between the two sources becomes progressively smaller, until, in 1973, it is actually reversed.

The issues of which state or states contribute to these discrepancies and why they occur are explored at the end of this chapter. However, the issue of which set of figures best matches the existing DEETYA time series has been settled on the basis of the legislative arrangements underpinning the funding of the students. Since the data from 1974 onwards reflect enrolments in award courses or units of award courses in the university and CAE sectors, it was decided to use the aggregated CBCS data where available (1968–1973), since these also relate to tertiary-level activity in approved courses in colleges of advanced education recognised under the *States Grants (Advanced Education) Act*.

Table 3.1

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
1964	76 188		76 188		76 188
1965	83 320	26 930	110 250	0	83 320
1966	91 291	28 182	119 473	0	91 291
1967	95 380	29 451	124 831	28 169	123 549
1968	101 537	37 257	138 794	28 615	130 152
1969	109 662	41 367	151 029	32 095	141 757
1970	116 778	44 677	161 455	37 794	154 572
1971	123 776	51 259	175 035	44 468	168 244
1972	128 668	53 669	182 337	52 170	180 838
1973	133 126	100 806	233 932	113 072	235 796
1974	254 691		254 691		254 691

Column 1	Year
Column 2	DEET university data (1974 includes colleges of advanced education)
Column 3	All project data for 1965–1973, including teacher college enrolments for 1973
	only
Column 4	Column 2 + Column 3—i.e. including all project data for 1965–1973
Column 5	Project data for recognised colleges of advanced education only for 1965–1967
	and CBCS data for 1968–1973 (including teacher colleges for 1973 only)
Column 6	Column 2 + Column 5—i.e. including only approved course enrolments



Figure 3.1 Enrolments in Higher Education—Two Models

For 1967, data collected by the project was used, although enrolments in colleges of advanced education not recognised by Commonwealth legislation in that year were excluded. It was not possible, however, to exclude activity in non-approved courses in these approved colleges of advanced education, since these figures could not be disaggregated. Therefore, the 1967 figure may slightly overestimate the true level of funded activity.

Student enrolments for 1965 and 1966 were excluded entirely, since no colleges of advanced education were funded on a recurrent basis under the *States Grants* (*Advanced Education*) *Act* during this time.

Using the same argument, teacher college enrolments have been included for 1973, since they were given CAE status in that year by the *States Grants (Advanced Education) Act*. Enrolments in private teacher colleges, however, are excluded, since these were not granted CAE status until 1974. Students enrolled in teacher training courses at universities or colleges of advanced education are also excluded, to avoid double-counting of these enrolments.

Figure 2.2 in the previous chapter, then, adds to the existing university enrolments data the CAE 'approved' enrolments as far as these can be determined, as well as teacher college enrolments in 1973. This results in two sharp increases in the rate of student enrolment growth. The first occurs in 1967, when CAE activity first comes under the responsibility of the Commonwealth. The second occurs in 1973, when teacher colleges first fall within the sphere of Commonwealth responsibilities.

Table 3.2 compares project data with CBCS data (where available) on a state by state basis for colleges of advanced education, while Table 3.3 does so for teacher colleges. In most cases, comparisons show data which match quite closely. The strong exception relates to CAE enrolments in Victoria from 1968 to 1970. These differences, in fact, account for virtually all of the discrepancies which we have noted at the national level.

The reasons for these differences in Victoria are difficult to establish. Certainly, they are confirmed by Victoria Institute of Colleges data for that period, which show considerably higher enrolments during this period than those reported in the CBCS data.

These data would seem to indicate that Victoria had high levels of activity during these years in courses which were not approved under the Commonwealth legislation. The discrepancy would thus be explained by a situation in which the Commonwealth reported only 'approved' tertiary activity, while the Victoria Institute of Colleges reported all tertiary activity.

It is noteworthy that even 'approved' CAE activity in Victoria was considerably higher than that found in other states, and nearly five times higher in simple student numbers than that of New South Wales, despite the larger population base of the latter. The reasons for this may relate to the relative structures of the tertiary sectors in these two states.

Victoria had only three universities, while New South Wales had five. It may be speculated that demand for tertiary-level training in New South Wales could be better accommodated within the existing university structures, both in terms of numbers and diversity. In Victoria, the traditional university education offered by Melbourne and Monash could satisfy neither demand for places nor for greater diversity of offerings, with the result that a vibrant and diverse network of colleges

of advanced education grew rapidly to keep up with demand for diploma-level studies.

Table 3.2 CAE Enrolments (CBCS data in shaded areas)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT
1965	724	16 795	3 102	2 343	3 459	507	0
1965							
1966	1 065	17 432	2 842	2 621	3 503	719	0
1966							
1967	1 871	17 210	2 710	3 019	3 708	933	0
1967							
1968	2 604	23 316	3 024	3 650	3 515	1 068	80
1968	3 302	14 956	2 147	3 580	3 394	1 078	158
1969	4 306	24 525	3 383	4 180	3 503	1 117	353
1969	3 795	16 980	2 265	4 153	3 420	1 145	337
1970	4 943	25 154	3 841	5 100	3 310	1 415	914
1970	4 710	19 399	3 108	5 014	3 443	1 140	980
1971	6 281	27 490	4 126	6 030	4 093	1 435	1 804
1971	5 836	21 725	3 922	5 675	4 242	1 435	1 633
1972	7 778	25 680	4 816	7 028	4 139	1 815	2 413
1972	8 471	24 139	4 578	6 773	4 291	1 811	2 107
1973	8 273	27 436	5 807	8 266	4 093	2 003	3 129
1973	10 902	26 056	5 432	7 841	6 662	2 003	2 679

Whether this same argument can be used to explain the extraordinary growth in non-approved activity in Victoria requires further study and is beyond the scope of this paper. What can be established, however, is that very little of this non-approved activity occurred in colleges of advanced education which were not recognised by Commonwealth legislation. By 1968, virtually all of the colleges existing in Victoria had been listed as eligible for funding under the *States Grants* (*Advanced Education*) *Act*, indicating that these institutions were quite active in attracting tertiary-level students who fell outside of the approved enrolments category.

Year	NSW	Vic	Qld	WA	SA	Tas	ACT
1965	5 244	6 552	2 141	1 408	3 163	344	
1965							
1966	7 691	8 014	2 195	1 628	3 446	345	
1966							
1967	7 791	9 174	2 271	1 771	3 589	375	
1967							
1968	8 554	10 460	2 626	1 924	3 781	422	
1968	8 997	10 035	3 146	1 961	3 493	1 057	
1969	9 285	11 121	2 870	2 187	4 063	521	
1969	9 994	11 526	3 621	2 249	3 783	1 124	
1970	8 898	12 498	3 086	2 490	4 638	266	
1970	11 547	12 916	3 925	2 512	4 272	1 198	
1971	11 139	12 775	3 319	2 781	5 128	330	
1971	14 904	13 642	4 358	2 829	4 732	1 332	
1972	13 605	14 515	3 640	3 324	5 263		
1972*	12 235	15 342	3 535	3 360	5 194		
1973	13 164	15 555	4 137	3 666	5 277		
1973*	12 545	16 792	3 667	3 713	4 378		

Table 3.3 Teacher College Enrolments—Departmental Students (CBCS data in shaded areas)

Certainly, non-approved activity in the tertiary sector was a real possibility, as suggested by Treyvaud and McLaren (1976):

Once a course is approved by the commission, it is eligible for funding by the Australian government. If it is not approved, it will not be financed under the *States Grants (Advanced Education) Act* and will have to be financed from other sources. (p. 42)

The same authors singled out the extensive and well-established network of colleges which existed in Victoria even prior to the advent of Commonwealth funding. They noted, in particular, that 'the high proportion of tertiary students at colleges in that state was balanced by the low per capita expenditure provided for them' (1976, p. 30).

In conclusion, the value of two alternative sets of enrolment figures must be emphasised. The CBCS data for 1973, the higher of the two figures, are almost certainly more accurate than the project data, as they incorporate by this time virtually all diploma-level activity.

For the previous years (1967–1972), however, any analysis of diploma-level activity in the CAE sector might make good use of the data generated by this project as an alternative indicator. Certainly, the levels of activity during this time are higher than those proposed by the CBCS figures, strongly suggesting that

^{*1972} and 1973 data exclude departmental students enrolled in universities or in colleges of advanced education

significant numbers of students were enrolled in tertiary courses outside the sphere of normal Commonwealth funding, and that this was particularly so in Victoria.

Appendix 1

Sources and References

Anderson, D.A. 1979, Post Secondary Education in South Australia: Report of the Committee of Enquiry, Government Printer, Adelaide.

Australian Commission on Advanced Education 1972, *Report for Triennium* 1973–1975, Commonwealth of Australia.

Australian Commission on Advanced Education 1972, *Third Report on Advanced Education*, AGPS, Canberra.

Canberra College of Advanced Education, *Annual Report* (1970–1973).

Clowes, D.A. 1995, 'Community colleges and proprietary schools: conflict or convergence' in Clowes, D.A. & Hawthorne, E.M. (eds.), *Community Colleges and Proprietary Schools: Conflict or Convergence, New Directions for Community Colleges*, No. 91, Fall 1995, Jossey-Bass, San Francisco.

College of Nursing, Australia, Annual Report (1969–1973), Melbourne.

Commission on Advanced Education 1975, *Draft Fourth Report on Advanced Education*, AGPS, Canberra.

Committee on Post-Secondary Education 1976, *Post-Secondary Education in Western Australia*, Minister for Education in Western Australia, Perth.

Commonwealth Advisory Committee on Advanced Education 1966, *First Report*, Commonwealth of Australia.

Commonwealth Advisory Committee on Advanced Education 1969, *Second Report 1970–1972*, Commonwealth of Australia.

Commonwealth Bureau of Census and Statistics, *Education Statistics Victoria* (1967–1972), Government Printer, Melbourne.

Commonwealth Bureau of Census and Statistics, *New South Wales Year Book* (1965–1974), Government Printer, Sydney.

Commonwealth Bureau of Census and Statistics, *Queensland Year Book* (1965–1974), Government Printer, Brisbane.

Commonwealth Bureau of Census and Statistics, *Victorian Year Book* (1965–1974), Government Printer, Melbourne.

Commonwealth Bureau of Census and Statistics, *Western Australian Year Book* (1965–1974), Government Printer, Perth.

Commonwealth Tertiary Education Commission 1987, *Tertiary Education Statistics*, Canberra.

Dawkins, The Hon. J.S. 1987, *Higher Education: A Policy Discussion Paper*, AGPS, Canberra.

Dawkins, The Hon. J.S. 1988, *Higher Education: A Policy Statement*, AGPS, Canberra.

Department of Education, New South Wales, *Report of the Minister for Education* (1965–1974).

Department of Education, Queensland, *Report of the Minister for Education* (1965–1967).

Department of Education, Queensland, Report of the Minister for Education and Cultural Activities (1968–1973).

Department of Education, South Australia 1971, Report of the Committee of Enquiry into Education in South Australia (1969–1970).

DEET (Department of Employment, Education and Training) 1993, *National Report on Australia's Higher Education Sector*, AGPS, Canberra.

DEET 1994, Credit Transfer and Recognition of Prior Learning in Australian Universities, Occasional Paper No. 10, Canberra.

DEET 1995, Higher Education Cross-Sectoral Initiatives, Canberra.

Department of Education, Queensland, *Report of the Minister for Education* (1965–1967).

Dookie Agricultural College, Annual Report (1965–1973).

Education Department, Tasmania, Report to Tasmanian Parliament (1966–1974).

Education Department, Western Australia, *Report of the Education Department* (1965–1968).

Education Department, Western Australia, *Annual Report Education Department* (1969–1973).

Education Department, Victoria, *Annual Report of the Minister for Education* (1965–1974).

Evans, S.I. 1965, 'Technical and technological education: South Australia' in Wheelwright, E.L. (ed.), *Higher Education in Australia*, Cheshire, Melbourne.

Ford, D.L. 1965, 'Technical and technological education: Evaluation of the existing system' in Wheelwright, E.L. (ed.), *Higher Education in Australia* Cheshire, Melbourne.

Golding 1995, Tertiary Transfer: The Unacknowledged Pathway from University to TAFE, Pathways Series, Issues Paper 2, Department of Education, Office of Training and Further Education, Melbourne.

Kindergarten Union of South Australia, Annual Report (1966–1974).

Minister for Education (South Australia), Report to Parliament (1966–1974).

Moorhouse, C.E. 1964, 'Technical and technological education' in Cowan, R.W.T. (ed.), *Education for Australians: A Symposium*, Cheshire, Melbourne.

New South Wales Advanced Education Board, Annual Report (1970–1973).

New South Wales College of Nursing, *Annual Report* (1966–1967).

New South Wales Institute of Technology, Annual Report (1969–1973).

Occupational Therapy School of Victoria, Annual Report 1967.

Perry, W. 1984, The School of Mines and Industries Ballarat, Ballarat.

Queensland Board of Advanced Education, *Annual Report* (1971–1974).

Smart, D. 1982, 'The pattern of post-war federal intervention in education' in Harman, G. & Smart, D. (eds.), *Federal Intervention in Australian Education: Past, Present and Future*, Georgian House, Melbourne.

Tasmanian College of Advanced Education, *Annual Report* (1972–1973).

Teese, R., Charlton, M., Polesel, J. & Davies, M. 1996. *Catholic Secondary School Students in Victoria: Attitudes, Achievement and Destinations*, University of Melbourne, Educational Outcomes Unit.

Committee on the Future of Tertiary Education in Australia (Martin Committee), *Tertiary Education in Australia 1964–65, Report to the Australian Universities Commission*, Government Printer, Canberra.

Treyvaud, E.R. & McLaren, J. 1976, Equal but Cheaper: The Development of Australian Colleges of Advanced Education, Melbourne University Press.

Tylee, A.F. 1965, 'Technical and technological education: Victoria' in Wheelwright, E.L. (ed.), *Higher Education in Australia*, Cheshire, Melbourne.

Victoria Institute of Colleges, Annual Report of the Council (1967–1973).

Wagga Agricultural College, *Presentation of Diplomas and Prizes and Principal's Report* (1965–1968).

Wood, J.F.D. 1965, 'Technical and technological education: New South Wales' in Wheelwright E.L. (ed.), *Higher Education in Australia*, Cheshire, Melbourne.

*In addition, the archives of individual institutions were accessed for data reported in minutes of meetings, unpublished reports, summary data sheets and tables and other forms. These are generally annotated as 'college statistics'.

Appendix 2

Relevant Acts of Parliament

Act No. 40 (1965)	 Universities (Financial Assistance) Act outlining recurrent funding for universities and South Australian Institute of Technology
Act No. 41 (1965)	States Grants (Technical Training) Act – outlining financial assistance for building works and purchase of equipment in various colleges
Act No. 102 (1965)	States Grants (Advanced Education) Act – outlining funding for building of colleges of advanced education
Act No. 89 (1966)	States Grants (Advanced Education) Act – outlining recurrent funding for 1967–69 triennium
Act No. 104 (1967)	 Canberra College of Advanced Education Act outlining funding for Canberra College of Advanced Education
Act No. 114 (1970)	 Canberra College of Advanced Education Act outlining funding for Canberra College of Advanced Education
Act No. 118 (1970)	States Grants (Advanced Education) Act – outlining recurrent funding for 1970–72 triennium
Act No. 26 (1970)	States Grants (Teachers Colleges) Act – outlining funding for building works in teacher colleges
Act No. 113 (1971)	States Grants (Advanced Education) Act – outlining revised recurrent funding for 1970–72 triennium
Act No. 58 (1972)	States Grants (Advanced Education) Act – outlining revised recurrent funding for 1971–72
Act No. 127 (1972)	States Grants (Advanced Education) Act – outlining revised recurrent funding for 1972
Act No. 128 (1972)	States Grants (Advanced Education) Act – outlining recurrent funding for 1973–75 triennium

Act No. 174 (1973) States Grants (Advanced Education) Act

- outlining revised recurrent funding for 1973

Act No. 175 (1973) States Grants (Advanced Education) Act

 outlining revised recurrent funding for 1973, including teacher colleges

Appendix 3

Sample Letter

letter.....

Appendix 4

State and National Aggregated Data

New South Wales

Colleges of Advanced Education

1965	1966
NSW Institute of Technology*	NSW Institute of Technology
Hawkesbury Agricultural College	Hawkesbury Agricultural College
NSW State Conservatorium of Music	NSW State Conservatorium of Music
NSW College of Occupational Therapy	NSW College of Occupational Therapy
School of Physiotherapy	School of Physiotherapy
Speech Therapy Training School	Speech Therapy Training School
NSW College of Nursing	NSW College of Nursing
Wagga Agricultural College	Wagga Agricultural College
1967	1968
NSW Institute of Technology	NSW Institute of Technology
Hawkesbury Agricultural College	Hawkesbury Agricultural College
NSW College of Occupational Therapy	NSW State Conservatorium of Music
School of Physiotherapy	NSW College of Occupational Therapy
Speech Therapy Training School	School of Physiotherapy
NSW College of Nursing	Speech Therapy Training School
Wagga Agricultural College	NSW College of Nursing
National Art School	Wagga Agricultural College
	National Art School
1969	1970
NSW Institute of Technology	NSW Institute of Technology
Hawkesbury Agricultural College	Hawkesbury Agricultural College
NSW State Conservatorium of Music	NSW State Conservatorium of Music
	NSW College of Occupational Therapy
School of Physiotherapy	School of Physiotherapy
School of Physiotherapy Speech Therapy Training School	School of Physiotherapy Speech Therapy Training School
NSW College of Occupational Therapy School of Physiotherapy Speech Therapy Training School NSW College of Nursing	School of Physiotherapy Speech Therapy Training School NSW College of Nursing
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College	School of Physiotherapy Speech Therapy Training School NSW College of Nursing
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1971 NSW Institute of Technology	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1972 NSW Institute of Technology
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1971 NSW Institute of Technology Hawkesbury Agricultural College	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1972 NSW Institute of Technology Hawkesbury Agricultural College
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1971 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1972 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1971 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1972 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1971 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy School of Physiotherapy	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1972 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy NSW College of Nursing
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1971 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy School of Physiotherapy Speech Therapy Training School	Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1972 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy NSW College of Nursing Wagga Agricultural College
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1971 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy School of Physiotherapy Speech Therapy Training School NSW College of Nursing	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1972 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy NSW College of Nursing
School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1971 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy School of Physiotherapy Speech Therapy Training School	School of Physiotherapy Speech Therapy Training School NSW College of Nursing Wagga Agricultural College National Art School 1972 NSW Institute of Technology Hawkesbury Agricultural College NSW State Conservatorium of Music NSW College of Occupational Therapy NSW College of Nursing Wagga Agricultural College

^{*}Commonwealth funding received for capital works (no enrolments until 1967)

1973

NSW Institute of Technology
Hawkesbury Agricultural College
NSW State Conservatorium of Music
NSW College of Paramedical Studies
School of Physiotherapy
Speech Therapy Training School
NSW College of Paramedical Studies
Wagga Agricultural College/
Riverina College of Advanced Education
National Art School
Orange Agricultural College

Bold type indicates institution was receiving federal funding that year under the States Grant $(Advanced\ Education)\ Act$

Teachers Colleges

1966
Wagga Teachers College
Bathurst Teachers College
Alexander Mackie College
Nursery School Teachers College
Sydney Kindergarten Training College
Sydney Teachers College
Armidale Teachers College
Newcastle Teachers College
Balmain Teachers College
Wollongong Teachers College
1968
1968 Wagga Teachers College
Wagga Teachers College
Wagga Teachers College Bathurst Teachers College
Wagga Teachers College Bathurst Teachers College Alexander Mackie College
Wagga Teachers College Bathurst Teachers College Alexander Mackie College Nursery School Teachers College
Wagga Teachers College Bathurst Teachers College Alexander Mackie College Nursery School Teachers College Sydney Kindergarten Teachers College
Wagga Teachers College Bathurst Teachers College Alexander Mackie College Nursery School Teachers College Sydney Kindergarten Teachers College Sydney Teachers College
Wagga Teachers College Bathurst Teachers College Alexander Mackie College Nursery School Teachers College Sydney Kindergarten Teachers College Sydney Teachers College Armidale Teachers College

Teachers Colleges (NSW) (cont.)

1969	1970
Wagga Teachers College	Alexander Mackie College
Bathurst Teachers College	Goulburn Teachers College
Alexander Mackie College	Nursery School Teachers College
Nursery School Teachers College	Sydney Kindergarten Teachers College
Sydney Kindergarten Teachers College	Sydney Teachers College
Sydney Teachers College	Armidale Teachers College
Armidale Teachers College	Newcastle Teachers College
Newcastle Teachers College	Lismore Teachers College
Balmain Teachers College	Balmain Teachers College
Wollongong Teachers College	Wollongong Teachers College
Westmead Teachers College	Westmead Teachers College
1971	1972
Alexander Mackie College	Alexander Mackie College
Goulburn Teachers College	Goulburn Teachers College
Nursery School Teachers College	Nursery School Teachers College
Sydney Kindergarten Teachers College	Sydney Kindergarten Teachers College
Sydney Teachers College	Sydney Teachers College
Armidale Teachers College	Armidale Teachers College
Newcastle Teachers College	Newcastle Teachers College
Lismore Teachers College	Lismore Teachers College
Balmain Teachers College	Balmain Teachers College
Wollongong Teachers College	Wollongong Teachers College
Westmead Teachers College	Westmead Teachers College
1973	
Alexander Mackie Teachers College	
Goulburn Teachers College	
Nursery School Teachers College	
Sydney Kindergarten Teachers College	
Sydney Teachers College	
Armidale Teachers College	
Newcastle Teachers College	
Wollongong Teachers College	

State: New South V	Vales		
Year	All	Teachers	CAEs
Enrolments			
1965	5 968	5 244	724
1966	8 756	7 691	1 065
1967	9 662	7 791	1 871
1968	11 158	8 554	2 604
1969	13 591	9 285	4 306
1970	13 841	8 898	4 943
1971	17 420	11 139	6 281
1972	21 381	13 605	7 778
1973	21 437	13 164	8 273

Commencements not available

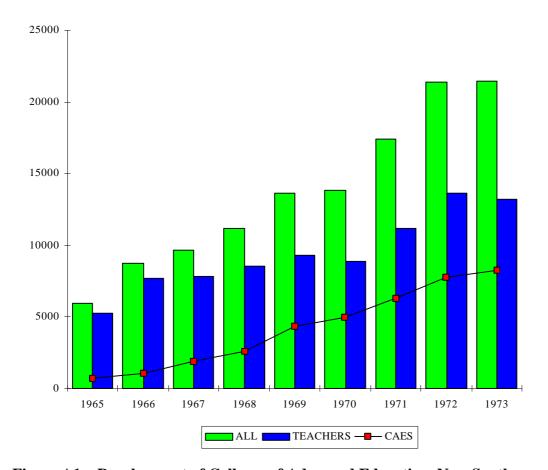


Figure A1 Development of Colleges of Advanced Education, New South Wales

Victoria

Colleges of Advanced Education

1965	1966
Ballarat School of Mines*	Ballarat School of Mines
Bendigo Technical College*	Bendigo Technical College
Caulfield Technical College	Caulfield Technical College
Footscray Technical College	Footscray Technical College
Gordon Institute of Technology*	Gordon Institute of Technology
Swinburne Technical College	Swinburne Technical College
Royal Melbourne Institute of Technology*	Royal Melbourne Institute of Technology
College of Pharmacy	Victorian College of Pharmacy
Preston Technical College	Preston Technical College
Prahran Technical School	Prahran Technical School
Yallourn Technical College	Yallourn Technical College
Warrnambool Technical College	Warrnambool Technical College
Occupational Therapy School	Occupational Therapy School
School of Speech Therapy	School of Speech Therapy
Physiotherapy School	Physiotherapy School
College of Nursing Australia	College of Nursing Australia
Emily McPherson College	Emily McPherson College
School of Forestry, Creswick	School of Forestry, Creswick
Longerenong Agricultural College	Longerenong Agricultural College
Dookie Agricultural College	Dookie Agricultural College
Burnley Horticultural College	Burnley Horticultural College

^{*} Commonwealth capital funding in 1965/no recurrent until 1967

1967	1968
Ballarat School of Mines	Ballarat School of Mines
Bendigo Institute of Technology	Bendigo Institute of Technology
Caulfield Institute of Technology	Caulfield Institute of Technology
Footscray Institute of Technology	Footscray Institute of Technology
Gordon Institute of Technology	Gordon Institute of Technology
Swinburne College of Technology	Swinburne College of Technology
Royal Melbourne Institute of Technology	Royal Melbourne Institute of Technology
Victorian College of Pharmacy	Victorian College of Pharmacy
Preston Institute of Technology	Preston Institute of Technology
Prahran College of Technology	Prahran College of Technology
Yallourn Technical College	Yallourn Technical College
Warrnambool Technical College	Warrnambool Technical College
Occupational Therapy School of	Occupational Therapy School of
Victoria	Victoria
Victorian School of Speech Therapy	Victorian School of Speech Therapy
Physiotherapy School of Victoria	Physiotherapy School of Victoria
College of Nursing Australia	College of Nursing Australia
Emily McPherson College	Emily McPherson College
School of Forestry, Creswick	School of Forestry, Creswick
Longerenong Agricultural College	Longerenong Agricultural College
Dookie Agricultural College	Dookie Agricultural College
Burnley Horticultural College	Burnley Horticultural College

1969	1970
Ballarat School of Mines	Ballarat School of Mines
Bendigo Institute of Technology	Bendigo Institute of Technology
Caulfield Institute of Technology	Caulfield Institute of Technology
Footscray Institute of Technology	Footscray Institute of Technology
Gordon Institute of Technology	Gordon Institute of Technology
Swinburne College of Technology	Swinburne College of Technology
Royal Melbourne Institute of Technology	Royal Melbourne Institute of Technology
Victorian College of Pharmacy	Victorian College of Pharmacy
Preston Institute of Technology	Preston Institute of Technology
Prahran College of Technology	Prahran College of Technology
Yallourn Technical College	Gippsland Institute of Advanced
	Education
Warrnambool Technical College	Warrnambool Institute of Technology
Occupational Therapy School of Victoria	Occupational Therapy School of Victoria
Victorian School of Speech Therapy	Victorian School of Speech Therapy
Physiotherapy School of Victoria	Physiotherapy School of Victoria
College of Nursing Australia	College of Nursing Australia
Emily McPherson College	Emily McPherson College
School of Forestry, Creswick	School of Forestry, Creswick
Longerenong Agricultural College	Longerenong Agricultural College
Dookie Agricultural College	Dookie Agricultural College
Burnley Horticultural College	Burnley Horticultural College

1971	1972
Ballarat Institute of Advanced Education	Ballarat Institute of Advanced Education
Bendigo Institute of Technology	Bendigo Institute of Technology
Caulfield Institute of Technology	Caulfield Institute of Technology
Footscray Institute of Technology	Footscray Institute of Technology
Gordon Institute of Technology	Royal Melbourne Institute of Technology
Swinburne College of Technology	Victorian College of Pharmacy
Gordon Institute of Technology	Preston Institute of Technology
Swinburne College of Technology	Prahran College of Technology
Royal Melbourne Institute of Technology	Gippsland Institute of Advanced
	Education
Victorian College of Pharmacy	Warrnambool Institute of Advanced
	Education
Preston Institute of Technology	Occupational Therapy School of Victoria
Prahran College of Technology	Victorian School of Speech Sciences
Gippsland Institute of Advanced	Physiotherapy School of Victoria
Education	
Warrnambool Institute of Advanced	College of Nursing Australia
Education	
Occupational Therapy School of Victoria	Emily McPherson College
Victorian School of Speech Sciences	School of Forestry, Creswick
Physiotherapy School of Victoria	Longerenong Agricultural College
College of Nursing Australia	Dookie Agricultural College
Emily McPherson College	Burnley Horticultural College
School of Forestry, Creswick	
Longerenong Agricultural College	
Dookie Agricultural College	
Burnley Horticultural College	

1973

Ballarat Institute of Advanced Education

Bendigo Institute of Technology

Caulfield Institute of Technology

Footscray Institute of Technology

Gordon Institute of Technology

Swinburne College of Technology

Royal Melbourne Institute of Technology

Victorian College of Pharmacy

Preston Institute of Technology

Prahran College of Technology

Gippsland Institute of Advanced Education

Warrnambool Institute of Advanced Education

Lincoln Institute of Health Sciences

College of Nursing Australia

Emily McPherson College

School of Forestry, Creswick

Longerenong Agricultural College

Dookie Agricultural College

Burnley Horticultural College

Victoria College of Arts

State College of Victoria Coburg

State College of Victoria Frankston

State College of Victoria Hawthorn

State College of Victoria IECD

State College of Victoria Melbourne

State College of Victoria Burwood

State College of Victoria Rusden

State College of Victoria Toorak

State College of Victoria Geelong

State College of Victoria Ballarat

State College of Victoria Bendigo

Teachers Colleges

1965	1966
Coburg Teachers College	Coburg Teachers College
Frankston Teachers College	Frankston Teachers College
Technical Teachers College	Technical Teachers College
Melbourne Kindergarten Teachers College	Melbourne Kindergarten Teachers College
Secondary Teachers College	Secondary Teachers College
Melbourne College of Education	Melbourne College of Education
Burwood Teachers College	Burwood Teachers College
Larnook Teachers College	Larnook Teachers College
Glendonald Teachers College for Teachers of the Deaf	Glendonald Teachers College for Teachers of the Deaf
Monash Teachers College	Monash Teachers College
Toorak Teachers College	Toorak Teachers College
Geelong Teachers College	Geelong Teachers College
Ballarat Teachers College	Ballarat Teachers College
Bendigo Teachers College	Bendigo Teachers College
1027	
1967	1968
Coburg Teachers College	1968 Coburg Teachers College
Coburg Teachers College	Coburg Teachers College
Coburg Teachers College Frankston Teachers College	Coburg Teachers College Frankston Teachers College
Coburg Teachers College Frankston Teachers College Technical Teachers College	Coburg Teachers College Frankston Teachers College Technical Teachers College
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers of the Deaf	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers of the Deaf
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers of the Deaf Monash Teachers College
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College Glendonald Teachers College for Teachers of the Deaf Monash Teachers College Toorak Teachers College	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers of the Deaf Monash Teachers College Toorak Teachers College
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College Glendonald Teachers College for Teachers of the Deaf Monash Teachers College Toorak Teachers College Geelong Teachers College	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers of the Deaf Monash Teachers College Toorak Teachers College Geelong Teachers College
Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College Glendonald Teachers College for Teachers of the Deaf Monash Teachers College Toorak Teachers College	Coburg Teachers College Frankston Teachers College Technical Teachers College Melbourne Kindergarten Teachers College Secondary Teachers College Melbourne College of Education Burwood Teachers College Larnook Teachers College Glendonald Teachers College for Teachers of the Deaf Monash Teachers College Toorak Teachers College

Teachers Colleges (Vic) (cont.)

1969	1970
Coburg Teachers College	Coburg Teachers College
Frankston Teachers College	Frankston Teachers College
Technical Teachers College	Technical Teachers College
Melbourne Kindergarten Teachers College	Melbourne Kindergarten Teachers College
Secondary Teachers College	Melbourne College of Education
Burwood Teachers College	Secondary Teachers College
Larnook Teachers College	Melbourne College of Education
Glendonald Teachers College for Teachers of the Deaf	Burwood Teachers College
Monash Teachers College	Larnook Teachers College
Toorak Teachers College	Glendonald Teachers College for Teachers of the Deaf
Geelong Teachers College	Monash Teachers College
Ballarat Teachers College	Toorak Teachers College
Bendigo Teachers College	Geelong Teachers College
e e	Ballarat Teachers College
	Bendigo Teachers College
1971	1972
Coburg Teachers College	Coburg Teachers College
Frankston Teachers College	Frankston Teachers College
Technical Teachers College	Technical Teachers College
Melbourne Kindergarten Teachers College	Melbourne Kindergarten Teachers College
Secondary Teachers College	Secondary Teachers College
Melbourne College of Education	Melbourne College of Education
Burwood Teachers College	Burwood Teachers College
Larnook Teachers College	Larnook Teachers College
Glendonald Teachers College for Teachers	Glendonald Teachers College for Teachers
of the Deaf	of the Deaf
Monash Teachers College	Monash Teachers College
Toorak Teachers College	Toorak Teachers College
Geelong Teachers College	Geelong Teachers College
Ballarat Teachers College	Ballarat Teachers College
Bendigo Teachers College	Bendigo Teachers College

State: Victoria	A 11	T. 1	CAE
Year	All	Teachers	CAEs
Enrolments			
1965	23 347	6 552	16 795
1966	25 446	8 014	17 432
1967	26 384	9 174	17 210
1968	33 776	10 460	23 316
1969	35 646	11 121	24 525
1970	37 652	12 498	25 154
1971	40 265	12 775	27 490
1972	40 195	14 515	25 680
1973	42 991	15 555	27 436

Commencements not available

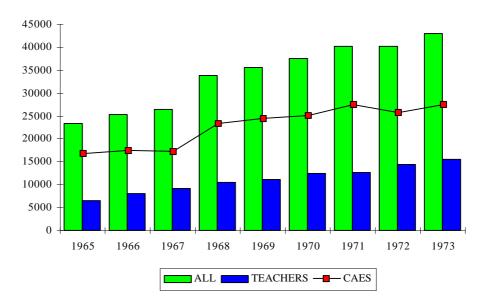


Figure A2 Development of Colleges of Advanced Education, Victoria

Queensland

Colleges of Advanced Education

1965	1966
Queensland Institute of Technology, Brisbane	Queensland Institute of Technology, Brisbane
Queensland Agricultural College	Queensland Agricultural College
Queensland Conservatorium of Music	Queensland Conservatorium of Music
1967	1968
Queensland Institute of Technology, Brisbane	Queensland Institute of Technology, Brisbane
Queensland Institute of Technology, Capricornia	Queensland Institute of Technology, Capricornia
Queensland Institute of Technology, Darling Downs	Queensland Institute of Technology, Darling Downs
Queensland Agricultural College	Queensland Agricultural College
Queensland Conservatorium of Music	
1969	1970
Queensland Institute of Technology, Brisbane	Queensland Institute of Technology, Brisbane
Queensland Institute of Technology, Capricornia	Queensland Institute of Technology, Capricornia
Queensland Institute of Technology, Darling Downs	Queensland Institute of Technology, Darling Downs
Queensland Agricultural College	Queensland Agricultural College
Queensland Conservatorium of Music	Queensland Conservatorium of Music
1971	1972
Queensland Institute of Technology, Brisbane	Queensland Institute of Technology, Brisbane
Capricornia Institute of Advanced Education	Capricornia Institute of Advanced Education
Darling Downs Institute of Advanced Education	Darling Downs Institute of Advanced Education
Queensland Agricultural College	Queensland Agricultural College
Queensland Conservatorium of Music	Queensland Conservatorium of Music

1973

Queensland Institute of Technology

Capricornia Institute of Advanced Education

Darling Downs Institute of Advanced

Education

Queensland Agricultural College, Lawes

Queensland Conservatorium of Music

Bold type indicates institution was receiving federal funding that year under the States Grant $(Advanced\ Education)\ Act$

Teachers Colleges

1965	1966
Brisbane Kindergarten Teachers College	Brisbane Kindergarten Teachers College
Kedron Park Teachers College	Kedron Park Teachers College
Kelvin Grove College of Teacher Education	Kelvin Grove College of Teacher Education
1967	1968
Brisbane Kindergarten Teachers College	Kedron Park Teachers College
Kedron Park Teachers College	Kelvin Grove College of Teacher Education
Kelvin Grove College of Teacher Education	
1969	1970
Brisbane Kindergarten Teachers College	Brisbane Kindergarten Teachers College
Kedron Park Teachers College	Kedron Park Teachers College
Kelvin Grove College of Teacher Education	Kelvin Grove College of Teacher Education
Mt Gravatt Teachers College	Mt Gravatt Teachers College
Townsville Teachers College	Townsville Teachers College
1971	1972
Brisbane Kindergarten Teachers College	Brisbane Kindergarten Teachers College
Kedron Park Teachers College	Kedron Park Teachers College
Kelvin Grove College of Teacher Education	Kelvin Grove College of Teacher Education
Mt Gravatt Teachers College	Mt Gravatt Teachers College
Townsville Teachers College	Townsville Teachers College

Teachers Colleges (Qld) (cont.)

1973

Brisbane Kindergarten Teachers College

Kedron Park Teachers College

Kelvin Grove College of Teacher Education

Mt Gravatt Teachers College

Townsville Teachers College

State: Queensland Year	All	Teachers	CAEs
	All		
Enrolments			
1965	5 243	2 141	3 102
1966	5 037	2 195	2 842
1967	4 981	2 271	2 710
1968	5 650	2 626	3 024
1969	6 253	2 870	3 383
1970	6 927	3 086	3 841
1971	7 445	3 319	4 126
1972	8 456	3 640	4 816
1973	9 944	4 137	5 807

^{3 492} commencements in 1973; other commencements not available

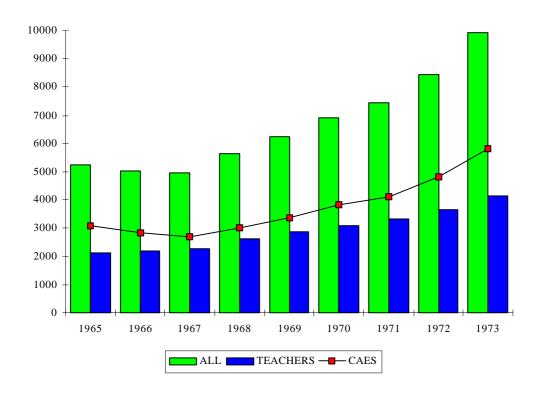


Figure A3 Development of Colleges of Advanced Education, Queensland

Western Australia

Colleges of Advanced Education

1965	1966
Perth Technical College*	WA Institute of Technology
School of Mines*	School of Mines
Muresk Agricultural College	Muresk Agricultural College
1967	1968
WA Institute of Technology	WA Institute of Technology
School of Mines (WAIT)	School of Mines
Muresk Agricultural College (WAIT)	Muresk Agricultural College (WAIT)
School of Occupational Therapy	School of Occupational Therapy (WAIT)
School of Physiotherapy	School of Physiotherapy (WAIT)

^{*}Indicates in receipt of some federal money for capital works in 1965

1969	1970
WA Institute of Technology	WA Institute of Technology
School of Mines (WAIT)	
Muresk Agricultural College (WAIT)	
School of Occupational Therapy (WAIT)	
School of Physiotherapy (WAIT)	
1971	1972
VA Institute of Technology	WA Institute of Technology
1973	

Teachers Colleges

1965	1966
Graylands Teachers College	Graylands Teachers College
Claremont Teachers College	Claremont Teachers College
Kindergarten Teachers College of Western Australia	Kindergarten Teachers College of Western Australia
1967	1968
Graylands Teachers College	Graylands Teachers College
Claremont Teachers College	Claremont Teachers College
Secondary Teachers College	Secondary Teachers College
Kindergarten Teachers College of Western Australia	Kindergarten Teachers College of Western Australia
1969	1970
Graylands Teachers College	Graylands Teachers College
Claremont Teachers College	Claremont Teachers College
Secondary Teachers College	Secondary Teachers College
Kindergarten Teachers College of	Mt Lawley Teachers College
Western Australia	Kindergarten Teachers College of Western Australia

Teachers Colleges (WA) (cont.)

1971	1972
Graylands Teachers College	Graylands Teachers College
Claremont Teachers College	Claremont Teachers College
Secondary Teachers College	Secondary Teachers College
Mt Lawley Teachers College	Mt Lawley Teachers College
Kindergarten Teachers College of	Churchlands Teachers College
Western Australia	Kindergarten Teachers College of Western Australia
1973	
Graylands Teachers College	
Claremont Teachers College	
Secondary Teachers College	
Mt Lawley Teachers College	
Churchlands Teachers College	
Kindergarten Teachers College of Western Australia	

Bold type indicates institution was receiving federal funding that year under the States Grant $(Advanced\ Education)\ Act$

State: Western A	Australia		
Year	All	Teachers	CAEs
Enrolments			
1965	3 751	1 408	2 343
1966	4 249	1 628	2 621
1967	4 790	1 771	3 019
1968	5 574	1 924	3 650
1969	6 367	2 187	4 180
1970	7 590	2 490	5 100
1971	8 811	2 781	6 030
1972	10 352	3 324	7 028
1973	11 932	3 666	8 266

Commencements not available

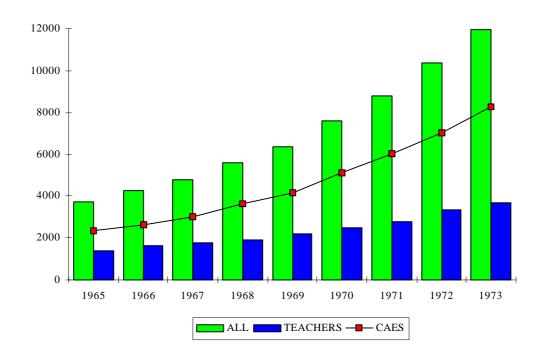


Figure A4 Development of Colleges of Advanced Education, Western Australia

South Australia

Colleges of Advanced Education

1965	1966
SA Institute of Technology (Adelaide, The Levels, Whyalla)	SA Institute of Technology
School of Art	School of Art
Roseworthy Agricultural College	Roseworthy Agricultural College
1967	1968
SA Institute of Technology	SA Institute of Technology
SA School of Art	SA School of Art
Roseworthy Agricultural College	Roseworthy Agricultural College
1969	1970
SA Institute of Technology	SA Institute of Technology
SA School of Art	SA School of Art
Roseworthy Agricultural College	Roseworthy Agricultural College
	School for Dental Therapists

1971	1972
SA Institute of Technology	SA Institute of Technology
SA School of Art	SA School of Art
Roseworthy Agricultural College	Roseworthy Agricultural College
School for Dental Therapists	School for Dental Therapists
1973	
SA Institute of Technology	
Torrens College of Advanced Education	
Roseworthy Agricultural College	
School for Dental Therapists	

Teachers Colleges

1965	1966
Adelaide Teachers College	Adelaide Teachers College
Western Teachers College	Western Teachers College
Wattle Park Teachers College	Wattle Park Teachers College
Adelaide Kindergarten Training College	Adelaide Kindergarten Training College
1967	1968
Adelaide Teachers College	Adelaide Teachers College
Western Teachers College	Western Teachers College
Wattle Park Teachers College	Wattle Park Teachers College
Bedford Park Teachers College	Bedford Park Teachers College
Salisbury Teachers College	Salisbury Teachers College
Adelaide Kindergarten Training College	Adelaide Kindergarten Training College
1969	1970
Adelaide Teachers College	Adelaide Teachers College
Western Teachers College	Western Teachers College
Wattle Park Teachers College	Wattle Park Teachers College
Bedford Park Teachers College	Bedford Park Teachers College
Salisbury Teachers College	Salisbury Teachers College
Adelaide Kindergarten Training College	Adelaide Kindergarten Training College

Teachers Colleges (SA) (cont.)

1971	1972
Adelaide Teachers College	Adelaide Teachers College
Western Teachers College	Western Teachers College
Wattle Park Teachers College	Wattle Park Teachers College
Bedford Park Teachers College	Bedford Park Teachers College
Salisbury Teachers College	Salisbury Teachers College
Adelaide Kindergarten Training College	Adelaide Kindergarten Training College
1973	
Adelaide College of Advanced Education	
Torrens College of Advanced Education	
Murray Park College of Advanced Education	
Sturt College of Advanced Education	
Salisbury College of Advanced Education	
Adelaide Kindergarten Teachers College	

State: South Australia				
Year	All	Teachers	CAEs	
Commencements				
1965	n/a	1 217	n/a	
1966	n/a	1 414	n/a	
1967	n/a	1 318	n/a	
1968	n/a	1 419	n/a	
1969	n/a	1 484	n/a	
1970	n/a	1 825	n/a	
1971	n/a	1 897	n/a	
1972	n/a	1 839	n/a	
1973	n/a	1 556	n/a	
Enrolments				
1965	6 622	3 163	3 459	
1966	6 949	3 446	3 503	
1967	7 297	3 589	3 708	
1968	7 296	3 781	3 515	
1969	7 566	4 063	3 503	
1970	7 948	4 638	3 310	
1971	9 221	5 128	4 093	
1972	9 402	5 263	4 139	
1973	9 370	5 277	4 093	

n/a not available

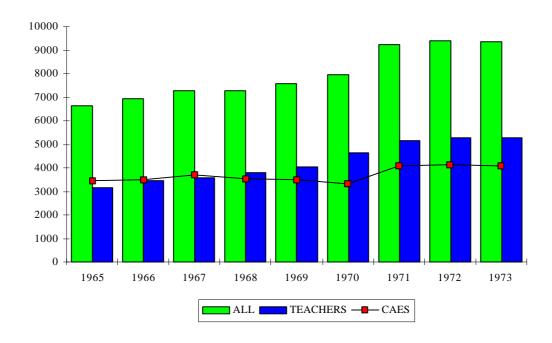


Figure A5 Development of Colleges of Advanced Education, South Australia

Tasmania

Colleges of Advanced Education

1965	1966
Tasmanian College of Advanced	Tasmanian College of Advanced
Education (Hobart Technical College)	Education (Hobart Technical College)
Tasmanian College of Advanced	Tasmanian College of Advanced
Education (Burnie Technical College)	Education (Burnie Technical College)
Tasmanian College of Advanced	Tasmanian College of Advanced
Education (Launceston Technical College)	Education (Launceston Technical College)
Tasmanian School of Art	Tasmanian School of Art
Tasmanian Conservatorium of Music	Tasmanian Conservatorium of Music

1967	1968	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Hobart Technical College)	Education (Hobart Technical College)	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Burnie Technical College)	Education (Burnie Technical College)	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Launceston Technical	Education (Launceston Technical	
College)	College)	
Tasmanian School of Art	Tasmanian School of Art	
Tasmanian Conservatorium of Music	Tasmanian Conservatorium of Music	
1969	1970	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Hobart Technical College)	Education (Hobart Technical College)	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Burnie Technical College)	Education (Burnie Technical College)	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Launceston Technical	Education (Launceston Technical	
College)	College)	
Tasmanian School of Art	Tasmanian School of Art (Tasmanian College of Advanced Education)	
Tasmanian Conservatorium of Music	Tasmanian Conservatorium of Music (Tasmanian College of Advanced Education)	
1971	1972	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Hobart Technical College)	Education (Hobart Technical College)	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Burnie Technical College)	Education (Burnie Technical College)	
Tasmanian College of Advanced	Tasmanian College of Advanced	
Education (Launceston Technical	Education (Launceston Technical	
College)	College)	
Tasmanian School of Art (Tasmanian College of Advanced Education)	Tasmanian School of Art (Tasmanian College of Advanced Education)	
Tasmanian Conservatorium of Music (Tasmanian College of Advanced Education)	Tasmanian Conservatorium of Music (Tasmanian College of Advanced Education)	

1973

Tasmanian College of Advanced Education (Hobart Technical College)

Tasmanian College of Advanced Education (Burnie Technical College)

Tasmanian College of Advanced Education (Launceston Technical College)

Tasmanian School of Art

(Tasmanian College of Advanced Education)

Tasmanian Conservatorium of Music

(Tasmanian College of Advanced Education)

Bold type indicates institution was receiving federal funding that year under the *States Grant (Advanced Education) Act*

Teachers Colleges

1965	1966
Hobart Teachers College	Hobart Teachers College
Launceston Teachers College	Launceston Teachers College
1967	1968
Hobart Teachers College	Hobart Teachers College
Launceston Teachers College	Launceston Teachers College
1969	1970
Hobart Teachers College	Hobart Teachers College (Tasmanian College of Advanced Education)
Launceston Teachers College	Launceston Teachers College
1971	1972
Hobart Teachers College (Tasmanian College of Advanced Education) Launceston Teachers College	Hobart Teachers College (Tasmanian College of Advanced Education) Launceston Teachers College
1973	Enumeration Teachers Contege
Hobart Teachers College (Tasmanian College of Advanced Education)	

State: Tasmania				
Year	All	Teachers	CAEs	
Enrolments				
1965	851	344	507	
1966	1 064	345	719	
1967	1 308	375	933	
1968	1 490	422	1 068	
1969	1 638	521	1 117	
1970	1 681	266	1 415	
1971	1 765	330	1 435	
1972	1 815	0	1 815	
1973	2 003	0	2 003	

Commencements not available

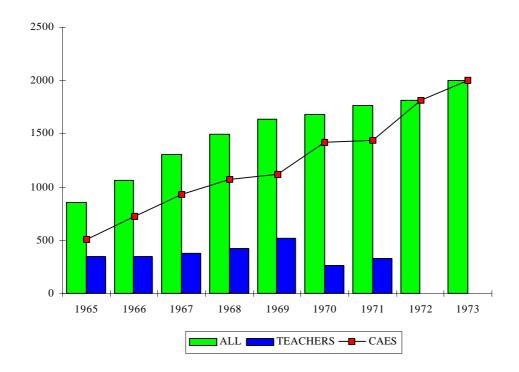


Figure A6 Development of Colleges of Advanced Education, Tasmania

Australian Capital Territory

1968		1969	
Canberra College of Advanced Education		Canberra College of Advanced Education	
1970		1971	
Canberra College	of Advanced Education	Canberra College of Advanced Education	
	1972	192	73
Canberra College	of Advanced Education	Canberra College of Advanced Educatio	
		Ç	
State: Australia	n Capital Territory		
Year	All	Teachers	CAEs
Commencemen	ats		
1965	0	n/a	n/a
1966	0	n/a	n/a
1967	0	n/a	n/a
1968	80	n/a	n/a
1969	276	n/a	n/a
1970	787	n/a	n/a
1971	1 160	n/a	n/a
1972	1 341	n/a	n/a
1973	1 500	n/a	n/a
Enrolments			
1965	0		0
1966	0		0
1967	0		0
1968	80		80
1969	353		353
1970	914		914
1971	1 804		1 804
1972	2 413		2 413
1973	3 129		3 129

n/a not available

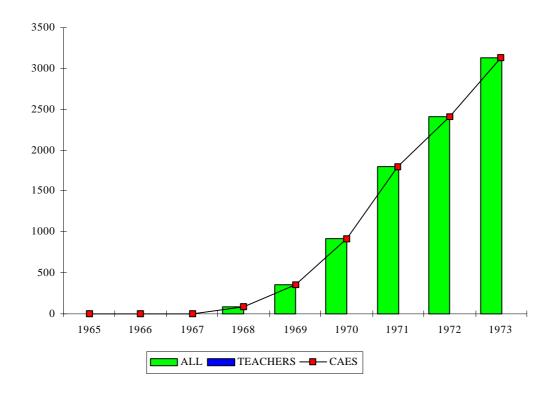


Figure A7 Development of Colleges of Advanced Education, Australian Capital Territory

(Note: CAE sector in ACT confined to Canberra College of Advanced Education, est. in 1968)

Australia			
Year	All	Teachers	CAEs
Enrolments			
1965	45 782	18 852	26 930
1966	51 501	23 319	28 182
1967	54 422	24 971	29 451
1968	66 437	27 767	37 257
1969	72 998	30 047	41 367
1970	78 505	31 876	44 677
1971	88 880	35 472	51 259
1972	96 056	40 347	53 669
1973	103 382	41 799	59 007
Commencements			
1965	45 782	18 852	26 930
1966	51 501	23 319	28 182
1967	54 422	24 971	29 451
1968	65 024	27 767	37 257
1969	71 414	30 047	41 367
1970	76 553	31 876	44 677
1971	86 731	35 472	51 259
1972	94 014	40 347	53 669
1973	100 806	41 799	59 007

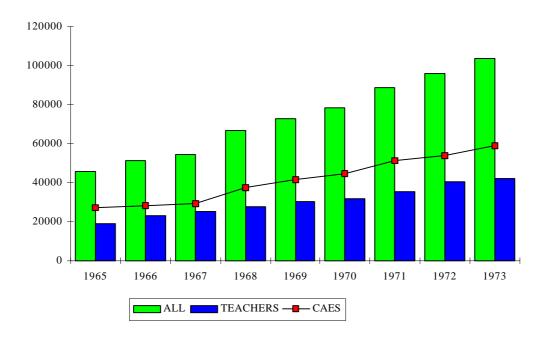


Figure A8 Development of Colleges of Advanced Education, Australia