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TAFE in Australia

REPORT ON NEEDS IN TECHNICAL AND FURTHER EDUCATION

April 1974—Volume 1: REPORT
Dear Minister,

We are pleased to present you with our advice as to the amount and allocation of financial assistance the Australian Government should make available to the States for the period 1 July 1974 to 31 December 1975, and the conditions on which such assistance should be granted. The recommended grants reflect the Committee's view of priorities within needs. We have also offered advice as to other appropriate measures that might be undertaken by the Australian Government towards the well balanced development of technical and further education.

We would like to add that we found ourselves handicapped in some respects by the specific direction to exclude training within industry.

We thank you for the opportunity to examine this important field and hope that our work will in time result in wider access to technical and further education and set the basis for the practical implementation of a policy of recurrent education in its broadest sense.

Yours sincerely,

M. Kangan (Chairman)

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Membership of the Committee

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George Brown, CMG, immediate past Chairman of Commissioners of the Victorian Railways, now a Member of the Victorian Railways Board.

Clifford Dolan, General Secretary, Electrical Trades Union of Australia, Federal Council, and Senior Vice President, Australian Council of Trade Unions.

Peter Fleming, Director, Staff Development, Department of the Public Service Board of South Australia, and Leader of team, Survey of Training Needs in Industry, Commerce and Government in South Australia, 1973.

Neil Gow, Chairman and Managing Director of R. M. Gow & Co. Ltd, Brisbane, and immediate past President of the Chamber of Manufactures, Queensland.

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George Lees, President of the Technical Teachers' Association of Victoria, Vice President of the Technical Teachers' Association of Australia, and Executive Member of the Australian Teachers' Federation.

William Paterson, Director of Technical Education, Western Australia.

Edward Richardson, Associate Professor of Education, Macquarie University.
The Terms of Reference

The Committee will furnish information and advice to the Minister for Education on matters relating to the development of technical and further education in Australia including financial assistance to the States in relation to institutions in the States. That information and advice will include:

(a) priorities within needs and appropriate measures to be undertaken by the Australian Government;
(b) the amount and allocation of financial assistance;
(c) the conditions upon which financial assistance should be granted.

In carrying out its task the Committee will take into account:

(a) the promotion of the vigorous and well balanced development of technical and further education throughout Australia;
(b) overall manpower policy and national and local occupational requirements;
(c) the emerging needs of industry, commerce and governments as they adjust to technological, economic and social change;
(d) community attitudes and the needs and aspirations of individuals seeking to undertake courses in technical and further education;
(e) the optimum use of resources.

For the purposes of the Committee, technical and further education is defined as post school education (other than that conducted by institutions supported through the Australian Universities Commission and the Australian Commission on Advanced Education) conducted by institutions administered or maintained by a government education authority. The Committee will not be concerned with grants for training within industry.
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Acknowledgments

The appointment of the Australian Committee on Technical and Further Education was announced by the Australian Minister for Education, the Hon. Kim E. Beazley on 26 April 1973.

The Minister said that the Committee '... will advise the Australian Government on the development of technical and further education in Australia and will make recommendations for financial assistance to State technical and further education institutions. This assistance will begin in July 1974'.

ACOTAFE held its first meeting on 25 May 1973 and thereafter met twelve times in full committee and there were very frequent meetings of sub-committees. The States were visited on a number of occasions — once by the full Committee and at other times by sub-committees or individual members. The Committee takes this opportunity of thanking State Ministers for Education and the Heads of their Departments for their generous co-operation and the kindness with which they facilitated its work.

A comprehensive questionnaire survey of technical college type institutions revealed a range of information about technical and further education not previously available but which it was essential for the Committee to have. The development and preparation of the questionnaires would not have been possible without the personal assistance of the Australian Bureau of Statistics, and neither could the completed returns have been collated and tabulated.

The completion of the questionnaires, the checking and re-checking of data, and accompanying information required concentrated efforts by the technical and further education authorities in all States, and their considerable patience. Their cooperation was unfailing.

In response to its invitation to be supplied with relevant information, ACOTAFE received more than two hundred written submissions ranging from organisations actively and currently involved in technical and further education to individuals with a concern for but not necessarily any involvement with the field. They were of high quality and strongly influenced the Committee's conclusions and, subsequently, its recommendations.

The Australian Department of Works, since absorbed in the new Department of Housing and Construction, served ACOTAFE unstintingly with technical advice on matters within its special competence.

The Committee wishes to acknowledge the professional advice and assistance received from a number of individual people outside the Australian Public Service on particular matters:

- Library Resource Centres: Mr E. Flowers, the University of Newcastle;
  Mr A. J. Brown, South Australian Institute of Technology.
- Direction and analysis of questionnaires: Mr R. G. Ritchie, Technical Schools Division, Education Department, Victoria.
- Chapter 3: Dr J. R. Niland, Australian National University.
- Sites for buildings: Mr B. J. Opie, Chartered Town Planner, Melbourne.
- Summary of Submissions: Mr R. F. Mackinnon, Warragul Technical School, Education Department, Victoria.
- Editing: Mr H. M. Searle, Electricity Trust of South Australia.

The Committee thanks their organisations for making their services available.

Last, but equally, the Committee expresses its deeply felt appreciation of the Secretariat, the staff, and individual officers of the Australian Department of Education for their sustained professional administrations.

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Preface

The first thing the Committee wishes to do is to record its appreciation of the tremendous contribution the technical and further education systems of Australia make to the vocational competence of most of the qualified skilled personnel in the community. This contribution is the result not only of the skill of administrators and teachers, but also of their devotion to duty and to the interests of the students who put trust in them. The Committee's terms of reference, however, did not call for advice on what was adequate in the present system. Consequently this Report takes for granted all that is good and draws attention to ways and means of making effective systems more effective. Similarly, although there have been considerable efforts by Governments in recent years to improve the physical environment of technical colleges, this Report is concerned only with the gap between the provision and the need.

Technical and further education is an integral component of the national resources that make for technological development, a skilled and mobile labour force, personal work satisfaction and economic growth. Nevertheless, it does not yet appear to rank officially as an integral part of the nation's education system.

Almost 70 per cent of men and over 80 per cent of women in the labour force have no formal educational qualification at the trade, technician or other vocational level, or a degree. People who become qualified as skilled workers other than at the professional level in the labour force do so the hard way. They do not have anything approaching equality of access to vocational education with those preparing for a livelihood by attendance at a university or in more recent times at a college of advanced education.

The concept central to this Report is the provision of unrestricted access to post school education through government maintained or administered institutions not already assisted through the Australian Universities Commission or the Australian Commission on Advanced Education. Alternatively, the major theme can be described as the removal of barriers from and the introduction of encouragement of entry into technical and further education by all adults.

The Committee adopted two guidelines early in its deliberations on the nature and scope of this Report.

(a) Recurrent opportunities for technical and further education should be available to people of all ages regardless of minimum formal educational entry requirements or of current employment status. Opportunities throughout life for recurrent education should give priority to the needs of the individual as a person and to his or her development as a member of society, including the development of non-vocational and social skills that affect personality.

(b) The broader the approach in technical and further education the more the likelihood of creating an environment in which self-motivated individuals can reach their vocational goals and in which motivation may be regenerated in people who have lost it.

The arguments that led to the Committee's adoption of these guidelines are reproduced in Chapter 1 which contains sections emphasising that vocational courses in TAFE institutions should be relevant to employment opportunities, that there are problems of access to TAFE by various sectors of the community, that recurrent education has to be understood as a concept before it can be implemented as a social objective, and that teachers have to be prepared to help to create an environment
conducive to active self learning as an alternative to the present near-monopoly of teacher instruction within institutions.

There are at least two alternatives to the emphases that can be given to the purpose of technical colleges and like institutions. A manpower orientation expresses their purpose as being to produce the skilled manpower necessary to the development of the economy. An educational and social emphasis is on their function to enable people to develop their potential as individuals but within the realities of the job opportunities by means of which they are aiming to use their education to earn a livelihood. The Committee has adopted the educational and social purpose of technical and further education as the more appropriate, without overlooking TAFE's vital manpower role.

Chapter 2 of the Report opens up a discussion of the nature of the systems of formal institutions within the various States and the structure of the TAFE authorities within each State. This Chapter is inconclusive for two reasons. First, the Committee felt that questions were involved that called for much more commentary from State governments and the community. Second, there is a lack of consistent and reliable information against which the anatomy of TAFE institutions can be appraised. There are no comprehensive statistical data either in the individual States or for Australia as a whole that will enable comparisons to be made between States or confident analyses of trends in vocational education as evidenced by the growth or contraction of courses.

In order to obtain adequate information which is comparable between bodies involved in TAFE and possibly with other educational institutions such as schools, universities, colleges of advanced education, teachers colleges or pre-school institutions, it is necessary to establish more adequate definitions of the various terms commonly used in compiling educational statistics. These terms include 'enrolment', 'equivalent full time student or teacher', 'correspondence enrolment', terms for types of courses and types of institutions.

The Committee with the collaboration of the Australian Bureau of Statistics conducted a preliminary survey of the formal TAFE educational institutions in each State. The results form the basis for the preliminary analysis in Appendix A where the limitations and inconsistencies of the data are noted at the outset; these inadequacies remained despite close co-operation from the State government authorities involved and the attempt to provide a common format for the collection of data. Time did not permit an exhaustive detailed analysis, but in any case it is more appropriate to await a second collection of more precise statistics. In Chapter 5 there is a recommendation that a Standing Committee be appointed within the structure of the proposed Commission to ensure continuing statistical collection, compilation and analyses.

Chapter 3 is similarly inconclusive, seeking cautiously to open the way to analyses in greater depth of trends in social and occupational change and the implications for trends in vocational education which should be reflected in what is happening in technical colleges and related institutions. Development of the work begun in Chapters 2 and 3 is fundamental to the future of TAFE as the most prolific source of vocational education to which people can turn for the practical purposes of earning a livelihood. This essential characteristic of government maintained or administered TAFE institutions should not be allowed to change.

Chapter 4 of the Report seeks to translate the purposes and objectives developed in Chapters 1 to 3 into practical action. Needs are reflected in the recommended grants for capital and recurrent expenditure during the period July 1974 to December 1975. The recurrent grants and the capital grants for equipment and minor works in existing premises are expected to be spent during that period, and the other major
capital grants represent the levels of programs which ought to be able to be put in train during that period.

Through such grants it is hoped that national standards for skill and accreditation will emerge, that the quality of existing accommodation and educational services will be raised to a standard which the community can accept as satisfactory, that learning environments can be developed through central resource centres and their satellites within individual institutions, that more libraries will become available, that personal help can be given to people through guidance and counselling services and that teachers can develop a new learning environment and can keep their knowledge up to date.

The Committee was sensitive during its work that its recommendations concerning financial support for technical and further education were required for the Minister's consideration in sufficient time to permit decisions that could be effective for the half triennium beginning 1 July 1974. It has not, however, been able to make a proper assessment of the eligibility of the Submissions it received from governmental and other bodies for financial assistance to training schools for their own employees. This task should be undertaken by the proposed Australian Commission on Technical and Further Education.

If TAFE is to fulfil its role and be accessible to adults without discrimination in the manner in which the Committee envisages, research must be encouraged into what is at present virtually a barren desert. Appendix A, to which reference has already been made, and other Appendixes should be some encouragement to researchers to interest themselves in this field. Self motivated researchers, however, are at present unlikely to opt in great numbers to study TAFE, its problems and its potential as a matter of priority because it has no established place as an integral part of the education system. They must be stimulated to do so. Chapter 4 proposes two approaches. First, publicise that research grants are available for study of particular fields and problems. Second, create an Australian TAFE Technology Centre in which the development of learning aids and related matters can be pursued. Employment at intervals for researchers in this Centre will be an encouragement to systematic research and an opportunity for researchers and practitioners to exchange views.
Interpreting the Terms of Reference

1. In the Submissions received from the wide cross section of the community listed in Appendix C, during its visits to the States and in discussions with community bodies and college committees, and from inquiries to and by individual members, the Committee found a deep concern about the direction, nature and system of technical and further education. The concern is for educational opportunities which are specific and meaningful, and, most importantly, accessible at whatever point in time or stage in life they can be useful. This has had a strong influence on the Committee’s interpretation of its terms of reference.

2. The reference to ‘further education’ resulted in a range of Submissions which assumed or hoped that ‘further’ would include an examination of ‘adult education’, that it embraced ‘general education’ which is vocational in its aims and helps people to adapt to changing employment opportunities, and that it covered ‘vocational education’ which by becoming ‘general’ in content and method would equip people to adapt to change more readily than will immediate job training. The Committee has adopted all these ideas, but has remained mindful of the on-going inquiry into the open university concept.

3. A major responsibility placed on the Committee by its terms of reference is to furnish the Australian Minister for Education with advice and information on ‘priorities within needs’ in TAFE. The Committee is not required to list all ‘needs’ nor place them in an order or priority, a task which would have proved impossible.

4. Another primary responsibility is the formation of views on the role of government administered or maintained institutions offering technical and further education, and informing the Australian Minister accordingly. These institutions serve a nation of some 13 million people of whom more than 43 per cent constitute the labour force. Australia has an economy in which business establishments have a constitutional right to transfer willing staff and to trade freely across State borders, and constitutes a federation of States where a quite considerable proportion of the population are mobile geographically, socially and occupationally within the limits of their personal preferences, aspirations, resourcefulness and means. Against this background it would be unreal to ignore the fact that TAFE in Australia is served by seven separate systems and government administrations with only minimal attempts at practical co-ordination.

5. The terms of reference look to the promotion of a vigorous and well balanced development of technical and further education throughout Australia. This development is possible only through an active, effective student body, not a passive set of buildings — important as accommodation is. The Committee does not see well balanced development as restrained extrapolation of, or interpolation within, all that now exists. On the contrary, it interprets its terms of reference as broad enough to include the purpose of vocational education and the responsiveness of technical and further education to a broad range of community needs. In the development of the individual, account must be taken of total needs which include those of being a citizen at work, at home and in the community at large.

6. The Committee believes that well balanced development is better served by gradual rather than abrupt changes. Probably the most difficult change to achieve is in deeply entrenched attitudes; these are modified only over time, and in some cases only after elderly influential administrators retire from the scene. Nevertheless, attitudinal considerations are implicit in a quest for well balanced development.
7. Clearly, there are many needs and they cannot all be met simultaneously. It can be difficult to determine which needs are the critical ones. This is partly because 'needs' may be seen as the 'wants' or 'desires' of individuals, groups or institutions and partly because, in common with most human perception, 'needs' are critical or unimportant depending on the degree of relevance to the people making the judgments. 'Needs' in an industrial context might refer to a lack or shortage of qualified staff. Again, 'needs' might refer to priorities and these might depend on different goals such as efficiency, productivity or some standard of a quality of living. And there are other possibilities.

8. The notion of the relativity of needs raises a series of questions — needs for whom, for what, and so on. Obviously, people's needs, the community's needs, industry's needs are interrelated, complex and ever changing. TAFE cannot efficiently respond to the needs of an affluent Australian community if it is merely a collection of separate discrete opportunity routes each of which is directed towards a specific goal. It is not realistic to attempt a classification of all individuals into distinctive educational or occupational groups. The motives for an individual's choice of vocational education are various and mixed. The Committee nevertheless interpreted its terms of reference as requiring a consideration of the human problems of access to education, of manpower policies, of the range of vocational education available now and needed in the future, and of the quality and volume of resources to meet needs. This is a continuing task and the Committee has attempted neither to exhaust the problems to be explored nor to find instant answers for problems uncovered.

9. It has been suggested that technical education is something of a poor relation to secondary education and other forms of post school education. The Committee interprets its terms of references as including an invitation to proffer advice on how the status of technical and further education might be raised. It believes, however, that attempts to alter status could fail so long as clear demarcations exist among educational streams and there is no clear relationship between progress in technical and progress in general education.

10. The Committee believes that all these questions require further and more detailed research, and that the optimum use of resources involves the determination of the best relationship between all streams of education, the teachers and facilities employed, and the requirements of industry and the community. This requires, in the Committee's view, consultation among and co-ordination of all commissions and committees on education set up by the Australian Government.
Summary of Conclusions and Recommendations

Conclusions

(1) For the purpose of the Terms of Reference for the proposed Australian Commission on Technical and Further Education, technical and further education should be regarded as describing all organised and sustained programs designed to communicate vocationally oriented knowledge and to develop the individual's understanding and skills. It should include all programs of education with a vocational purpose, other than those financially supported by other Commissions, whether the individual is using the program with employment as a primary aim or with the aim of gaining additional specialised knowledge or skills for personal enrichment or job improvement. It includes what is usually known as 'adult education'. It does not include activities which have no direct educational purpose, and which are not planned as a systematic sequence, for example, social and corporate activities such as meetings of clubs, associations, or work camps having no explicit educational aim.

(2) The main purpose of education is the betterment and development of individual people and their contribution to the good of the community. Technical and further education should be planned accordingly. Emphasis on the needs of the individual should lead to easier access to learning, to better physical conditions for learning, to suitable student and teacher amenities, to welfare facilities, and to the highest standards of health and safety in workshops and laboratories.

(3) The emphasis in technical college type institutions should be primarily on the needs of the individual for vocationally oriented education and the manpower needs of industry should be seen as the context for courses. Relevant legislation both Federal and State could, to the community's advantage, be suitably amended to confirm this.

(4) Under the combined influences of technological, demographic and social changes, technical and further education is affecting a continually increasing proportion of the adult population, and this trend will continue. Most people seeking technical and further education are commonly influenced by utilitarian motives. As a result, it is important that general education be seen as relevant to vocational purposes and that vocational education in turn becomes more general in its content and methods so that people can be better prepared to adapt themselves to changing conditions and to re-training, as necessary, at any time of their working lives.

(5) Real barriers to vocationally oriented education exist, more so in some States than in others. Strong emphasis should be placed on unrestricted access to recurrent education. The colleges should extend preparatory courses, transfer courses and other help to enable adults to attempt the level of vocational education they desire, including the making good of omissions or deficiencies related to primary and secondary schooling. There should be unrestricted access to assessments of knowledge and skills for the purpose of gaining formal qualifications, irrespective of where or how the individual prepared himself. Entry requirements should be progressively eased.

(6) Technical and further education has too often been thought of as something different from a tidy mainstream of education — primary, secondary and tertiary. The proper perspective for the fourth quarter of the twentieth century is for technical and further education to be seen as an alternative — neither inferior nor superior —
to the other stream of education, but so organised as to enable interchange without personal disadvantage.

(7) It is unrealistic to divide life into two parts — formal education during youth, and employment during adulthood. Formal schooling alone to the age of 15 or 16 is unlikely to educate a person for a lifetime, especially as the pace of technological and social change appears to be increasing and affecting the nature and structure of occupations.

(8) Recurrent education should be accepted as an integrating principle, the effective application of which requires co-ordination of the different levels and categories within the education system, including courses conducted by institutions supported through the Australian Universities Commission and the Australian Commission on Advanced Education.

(9) The concept of recurrent vocationally oriented education is especially relevant to technical and further education. It offers the best hope whereby the community can cope with shifting job specifications resulting from technological and social change, and especially with new employment opportunities which open up. Technical college type institutions constitute the widest networks available in Australia for the formal vocational education of adults, and hence are particularly well suited to extend recurrent education practices and procedures. They should be given every opportunity to do so.

(10) Opportunities for recurrent education should help individuals who wish to repair inadequacies in their initial formal education or add to their knowledge and skills in order to change the direction of their vocational interests.

(11) The full application of the concept of recurrent education requires flexibility in working life which permits variations in hours of daily or weekly work, and some arrangements concerning study leave. Technical college type institutions already provide a wide variety of arrangements of courses which entail variable working hours, such as day release courses, block release arrangements, and sandwich courses. Social and industrial provisions which permit people to withdraw from the labour force temporarily to re-enter formal institutions of learning involve questions relating to income maintenance for potential students, costs to the employer and the community and, more far reaching, essential questions concerning priorities of social objectives. A national inquiry into the implications of paid study leave as related to recurrent vocationally oriented education is urgently required with a view to informing the community of the options that could be available immediately and those that could require further deliberation.

(12) There should be more opportunities for individuals to learn at their own pace and at such times as may be convenient to them by making it easier for them to have access to self learning aids, resources such as libraries, correspondence lessons, and audio and visual presentations.

(13) The demand for education throughout life can be expected to grow not simply because of changes in technologies and social organisation but also because people will become increasingly aware of the practical advantages that it gives the individual in respect of employment and livelihood. The cost of formal vocational education, however, will inhibit its growth unless advantage can be taken of new learning technology that can supplement formal teaching strategies and/or substitute self learning techniques for formal classroom attendance. Technology in educational strategy warrants very considerable development, and efforts should be encouraged to spread its use.

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Colleges of external studies and like institutions should be expanded and encouraged financially to make available their self learning techniques and material to all capable and motivated persons. Eligibility for external studies should not depend on place of residence although obviously people who live in remote areas, or long distances from schools or colleges, or who suffer from illnesses and physical handicaps impeding attendance at classes, should have first call on what is available.

Relevance is the key principle in courses. Content must be kept relevant, and little-used knowledge and skills should be removed. Reviews for this purpose might be justified every two or three years of apprenticeship, post apprenticeship, technician area courses and the like, which are continually under the influence of technological change. In all States, committees of persons appointed from industry to assess course contents are used to a greater or lesser extent and are very helpful. Maintaining the relevance of contents of courses, however, is a task for specialists who can identify the critical requirements of vocations, and jettison material that is irrelevant. The Australian Government should help all States to employ and develop more such specialists.

TAFE authorities are responsible for ensuring that course content is relevant to occupational excellence. For this reason, they should keep in continuous touch with occupational trends. The proposed Australian Commission on Technical and Further Education should provide in its organisation for liaison with labour authorities — at national and State levels — to try to facilitate a regular flow of manpower information to the appropriate education authorities and to the public through counselling services.

Individuals, local communities, education authorities, industries and public services would all be assisted by reliable information as to the equivalence of vocational courses conducted in the different States and the Territories. The proposed Australian Commission on Technical and Further Education should arrange for the information to be prepared, revised and published in an appropriate form. If a State should wish to amend a course for the purpose of achieving equivalence, a request for financial assistance to do this should be considered sympathetically.

The pace and volume of research should be stepped up concurrently with action to facilitate:

(a) understanding the problems of access to vocational education, problems of literacy, and learning difficulties experienced by adults of various ages, in association where practicable with the Commonwealth Commission of Inquiry into Poverty and other relevant bodies, and developing the means of answering them;

(b) development of improved and increasingly more reliable and valid methods of assessment and reporting of students' educational achievements and the fostering of methods whereby progress in learning outside formal teaching institutions can be identified and credited to the individual by way of qualifications;

(c) development of educational technology and its increased integration into learning strategies;

(d) dissemination of self learning facilities in conjunction with or additional to correspondence or other external studies arrangements;

(e) on-going identification of those courses or awards where it is desirable to achieve equivalence among States and review of objectives, guidelines and standards to achieve a desirable degree of consistency;
(f) more frequent revision of curricula in the light of technological, social, and other change;

(g) re-design of courses to integrate social and communication skills, both oral and written, with technical skills and give students a broad awareness of the social implications of technological and other emerging developments in their fields.

(19) More use is likely to be made of public educational facilities and services if the community is aware of what is available. Awareness requires publicity which is meaningful to the wide range of persons beyond school age. This publicity requires specialist staff. The Committee is doubtful that it will be effective otherwise.

(20) To help people plan to make the best use of their potential within their capacity, counselling and guidance services should be provided at each technical college, where individuals, whether enrolled or not in any course, may obtain information about how their goals can be pursued and their own likelihood of achieving these. These services can offer new career opportunities for experienced technical instructors or teachers or lecturers; trained psychologists may be needed for some counselling cases. Similar services should be available at regular intervals to people in remote areas.

(21) The services of social workers should be available to college students for counselling on personal, family or social problems. College organisations should be such as to try to avoid losing students because of such problems.

(22) If self learning in the sphere of vocational education is to be effective, there must be a supporting staff of mobile tutors to assist people with their studies, and provide remedial tuition, if necessary, and mobility among students to contact institutions when the need arises.

(23) If the preceding Conclusions are to have an effective widespread impact on the concepts and development of TAFE it will be necessary to capture the enthusiasm of teachers and to provide them with opportunities to gain the background and skills required. Emphasis on providing an educational service to people of all ages, regard for individual needs, technology in education, self paced adult learning, use of library resource centres, unrestricted access, recurrent vocationally oriented education, counselling and guidance services, social worker help, tutorial assistance — all these must be made an integral part of technical teacher training. The kind of teacher education and training, both initial and in-service, that is provided will determine how technical and further education develops.

(24) Access to further education by many persons who reside outside large metropolitan areas would be facilitated by the development of community type colleges which would help adults overcome deficiencies in their primary and secondary schooling and offer courses up to diploma level, where necessary, in addition to the range and level of courses customarily available from technical colleges. Such a development should, of course, have proper regard to practical economics and to educational standards at other institutions to which students may later wish to transfer, or from which they may wish to gain recognition for completed subjects. It is to be hoped that this Conclusion will not tempt principals or other education administrators to change the nature and character of 'technical colleges' whose designation they may decide to alter to that of 'community college'. Course levels at colleges should be determined by educational criteria alone and not by whether they can attract funds from the Australian Government which at present might not otherwise be available. The great majority of students at technical colleges
are there to gain applied knowledge and practical skills, and the colleges should continue to cater essentially for this kind of education. No useful purpose would be served by attempts to compete with institutions offering more advanced studies.

(25) Problems of access by adults to further education cannot be completely resolved by government administered educational institutions. Some individuals — perhaps many — can more appropriately be assisted by voluntary providing bodies, and financial assistance from the Australian Government should be considered for such bodies whose sole objective is adult education and which are not operated for profit.

(26) Technical education authorities and technical colleges have in years past suffered from insufficient finance to provide adequately for the growing demand for class accommodation and for back-up resources essential for planning future development and keeping present educational facilities, including course content, up to date. Education’s appetite for money is, of course, insatiable. Nevertheless, the State TAFE systems should not be suffering so severely as they obviously are from inadequate resources for planning to meet capital and recurrent needs, continuously producing statistical information on which to base decisions, conducting research for curriculum development, arranging in-service education for teaching and other staff, and carrying out other essential staff functions that should be expected from ‘headquarters’.

(27) Financial stringency may also be a reason why the physical provisions of so many colleges recall outmoded attitudes in industry when production departments were planned to the exclusion of physical amenities for and the social welfare of people. Departmental administrators, exceptions notwithstanding, do not appear to have sufficient authority to reject building plans that are inappropriate to present day thinking about the quality of adult living and of conditions for learning. The proposed Australian Commission on Technical and Further Education should not recommend finance for building projects without satisfying itself that the architectural design is adequate to the social needs of the student community as well as to technical requirements of classrooms and workshops.

(28) Some technical colleges are under heavy strain to cope with the demand for vocational education from adults during hours customarily regarded as appropriate for part time attendance.

(29) Paradoxically, however, the total accommodation and the equipment available at a large number of colleges is under-utilised at times of the day; for example, some technical colleges do not use the mornings for scheduled instruction on the grounds that employers would not release students. The Committee noted that views such as these were based on belief rather than the test of experience.

(30) TAFE authorities should experiment with timetables that aim at more economic usage of capital than is currently achieved, including new patterns of attendance.

(31) The distinguishing features of technical colleges are the adult student population, predominantly between the ages of 18 and 24 years, their part time attendance pattern, and the supplementary nature of studentship to job holding.

(32) The external studies programs of the technical college system are by far the major part of external studies for all types of post school education from government administered or maintained educational institutions.
(33) Technical college education is vocationally oriented and is generally intended for knowledge users as distinct from knowledge originators.

(34) Technical college qualifications do not have universal interpretations or recognition. They can achieve this only if the different State authorities collaborate to produce equivalence and acceptable interpretations.

(35) TAFE courses currently provide some primary and secondary schooling for adults on the one hand and some advanced education on the other. There is no reason why this seeming overlap should not continue in appropriate circumstances with Australian Government financial support. The relevant education Commission set up by the Australian Government should develop ways and means.

(36) TAFE authorities operate through varying departmental structures in the States and Territories.

(37) The Committee has noted that except for recent action in Victoria TAFE authorities do not have well developed mechanisms for direct community responsibility and involvement. The Committee believes that community involvement in development and administration is highly desirable. However, traditionally efforts in this direction have been weak and most involvement restricted to advisory bodies. Consequently, the Committee had very little practical experience to draw on in considering what view it should put on this matter. It is the Committee's intention to recommend to the proposed Australian Commission on Technical and Further Education that it consider funding research into ways and means by which the Australian Government can finance effective community responsibility and involvement in TAFE.

(38) Liaison between TAFE authorities and employer bodies, the trade union movement, professional institutes and like bodies should be such to ensure continuing effectiveness of industry committees.

(39) Departmental structures should be subject to more intensive study by the proposed Australian Commission on Technical and Further Education, and the view relating to the advantages of TAFE under authorities separate from education departments should be subject to public discussion.

(40) The extension of the option of full time attendance at technical colleges should be expedited without prejudice to the present option of part time attendance. The pro rata application of means tested living allowances should be explored for part time students whose net incomes may be adversely affected by day time attendances at courses. The proposed Australian Commission on Technical and Further Education should test community attitudes towards these two concepts.

(41) Enrolments in technical colleges are mainly in the vocational streams. The minority are in courses preparatory to other studies or in adult education. The Preparatory and Adult Education Streams are the most likely to attract older age groups to re-enter formal education, and the rewarding of successful study by formal recognition should be examined.

(42) Enrolments in technological fields no longer predominate in technical colleges although the largest single group of enrolments is in the engineering field which is strongly influenced by compulsory apprenticeship enrolments. More than 50 per cent of all enrolments are in the non technological fields such as art, music, business, general studies, and various service studies such as food services, fashion and transport.
Apprentices received the most concentrated teaching attention and the Preparatory and Adult Education Streams the least. This does not mean that too much effort is given to apprentices. It is rather a question of whether the size of classes in the Preparatory and Adult Education Streams is sufficiently small to enable individuals to obtain personal attention when it is needed. TAFE authorities should be sensitive to the probability that the sense of success or failure engendered in adults who attend the Preparatory and Adult Education Streams will strongly influence the extent to which the community practises the concept of recurrent education.

The organisation of technical college courses should be revised to include a full time option for students who in its absence enter the labour force prematurely and most of whom are not attracted to the tertiary courses available on a full time basis at other institutions. There is no logical reason why the community should not subsidise the vocational education of persons wishing to study for skilled or middle level occupations at a technical college to the same extent as applies to persons seeking a degree or diploma at a university or college of advanced education.

More full time attendance options should be available to young persons who wish to re-enter the stream of vocational education to seek further education or a formal qualification for which their work experience has led them to feel a need. The availability of such options should not reduce the part time option concurrent with work experience.

If the 1973 student pattern at technical colleges throughout Australia remains constant, the enrolment level would be expected to increase relatively slowly, by about 150,000 between now and the early 1990s; the actual increase will be affected by trends in the 15-29 year age groups in the population and the labour force, and to the increased retention rates in secondary schools. Because there are heavy concentrations of under 30s in the migrant intake, the level of net migration over the period will also have significant effects on the growth of enrolments. If TAFE participation were to increase each decade to a level 5 per cent higher than the level of participation at the start of the decade for all academic streams except the Trades Stream, enrolments would grow by 189,000 by the early 1990s; corresponding increases of 10 per cent and 15 per cent would lead to increases of 231,000 and 274,000 enrolments respectively.

The 1973 pattern of participation at technical colleges, of course, is almost certain to change. A number of State TAFE authorities have already taken action to make this inevitable, especially in the Para Professional, Preparatory, and Adult Education Streams.

Three influences are likely to support stronger and more purposeful action by TAFE authorities to attract an increasing number of people to re-enter educational streams that can affect their livelihood. First, the youthfulness of the population, some 46 per cent being under 25 years of age. Second, a spreading concern that educational effort should be linked with the practical goals of securing satisfying occupations. Third, the still growing participation of married women in the labour force, and the potential they offer for increasing the proportion of the population with formal qualifications.

Special attention should be devoted to migrant youths in the 15-19 age group to obviate language problems that may otherwise inhibit them from pursuing TAFE.

Women are presently less likely to enrol in TAFE than men. There is wide scope for women of all ages to gain formal qualifications in both the technological
and non technological fields in technical colleges, and enhance their occupational
standing. With the advantage of formal qualifications acquired during their youth,
women could resume more prestigious careers later in life with less re-training.

(51) Special attention should be given to the facilities in technical colleges for
married women to gain formal vocational qualifications. In particular, the
convenience of attendance times, facilities for child care for short periods, the
amenities, and the psychological and emotional complexities of mature women
sharing the same formal class facilities with adolescents just out of secondary school
should be examined in each State as a matter of urgency.

(52) The Para Professional, including technician, Stream of TAFE is linked to
middle level occupations in industry and commerce in which career opportunities are
increasing faster than in other fields. The considerable enrolments in this Stream in
technical colleges, however, do not appear yet to have added proportionally to the
numbers in the community with formal qualifications and the proposed Australian
Commission on Technical and Further Education should seek a more adequate
explanation for this than is available at present.

(53) More action is desirable to link streams of vocational education in technical
colleges to career opportunities in secondary industry and the fast growing tertiary
industries. Young people at schools should be given more information about the
relationship between available courses and existing occupations, and TAFE
authorities should re-examine career opportunities to assess the sufficiency and
relevance to the labour market of the current range of courses. More mature adults
should be reached with information about preparatory and other courses that can
help them move into more skilful occupations. Migrant communities should be
approached through improved college counselling services to explain how overseas
para professional qualifications can be converted to Australian equivalents through
technical colleges; TAFE authorities should examine whether there is some way by
which such qualifications can be endorsed directly or by supplementary studies.
There is no reason why examinations and other forms of assessment in the Para
Professional and other streams need be conducted in the English language
exclusively.

(54) The proposed Australian Commission on Technical and Further Education
should consult the Australian Bureau of Statistics to develop definitions and
classifications of occupations to reveal shifts in occupations that affect vocational
education.

(55) Geographic mobility among adults usually occurs after their initial vocational
training has been completed. Until an assessment can be made of the manner and
extent of changes in local labour markets that result from the development of the
proposed growth centres, all non metropolitan technical colleges should provide a
sufficiently wide range of vocational education not only to match local employment
opportunities but also to facilitate the geographic mobility which is inevitable.
Persons being educated in non metropolitan areas should not be disadvantaged by
lack of opportunity to gain formal qualifications that are not relevant to the local
scene.

(56) Planned growth centres should receive special consideration when the locations
of future technical colleges, and especially community colleges, are being
determined. Those responsible for planning and acquiring sites for TAFE and their
counterparts in other tertiary educational areas should consult closely and
collaborate without competing for development.

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(57) Special attention should be devoted to preparation for para professional, including technician, occupations. The range of such courses should be increased when gaps are found, and there should be a deliberate extension of both college based and works based sandwich options and block attendance. The proposed Australian Commission on Technical and Further Education should make an early opportunity, in collaboration with labour authorities, to consult the trade union movement, professional organisations, and employer bodies, to encourage an acceptable rationale in so far as the educational aspects of the system are concerned.

(58) The Para Professional Stream in a range of fields needs detailed examination to avoid overlap with the colleges of advanced education, and the proposed Australian Commission on Technical and Further Education should initiate discussions with the Australian Commission on Advanced Education as to how this can best be achieved. It is obvious that middle level occupations in community services, health, recreation, education, libraries, and child care will increase their share of the labour force. TAFE authorities should be sensitive to this requirement and react accordingly. The proposed Australian Commission on Technical and Further Education should be prepared to support requests for suitable financial assistance from the States to this end.

(59) First year apprentices in technical colleges are now predominantly in the 16-18 age range, replacing the former predominance of the 15 year olds.

(60) Efforts to interest larger numbers in the 16-18 year age groups in apprenticeship require a fresh approach from that used in the past to attract 15 year olds. This longer educated group is more aware of alternative career opportunities, and can be expected to have an increased interest in the Para Professional Stream in which enrolment by men is now second to the Trades Stream. TAFE authorities can contribute to apprenticeship recruitment efforts by making more information available to schools as to the credits available to better educated youths that can shorten the total apprenticeship period. Pre-employment courses should be extended over more trades but they should not be the only educational means recognised and credited to the apprenticeship period.

(61) In the immediate past, the high growth rate in the 15-19 year age groups exceeded the growth rate in apprenticeship opportunities. This position is likely to change as the growth rate in the 15-19 year olds decreases. Unless the rate increases at which people in this age group enter apprenticeships, it is likely that there will not be enough seeking apprenticeships to fill all the opportunities available; this appears to have started already in the metal trades in New South Wales.

(62) In the light of population and labour force trends and the tendency for youths to gain more education, the gap between the supply of apprentices and the demand for tradesmen is unlikely to be closed by the number of 15-19 year olds entering apprenticeship unless changes to the system occur more rapidly to suit present social and industrial circumstances. One of the principal changes should be to implement Conclusion (44) whereby youths would be subsidised as students, if they are prepared to study at a technical college full time in the trades area for a period; this period would be credited as part of the apprenticeship, should they subsequently enter the trades. This would require a conscious policy change. The fiction of the present apprentice-in-industry concept is that apprenticeship training is essentially on the job training, supplemented by attendance at school. The actuality, however, is the mixed system concept in which schooling and job experience are a partnership, that is, are complementary. The mixed system should make provision for an introductory period
of education and training off the job for the learning of the basic elements of trades and proper work methods and be followed by periods of training and experience in industry. Changes may be necessary in industrial law to bring about the maximum flexibility in apprentice training arrangements.

(63) The eventual development of the mixed system described in the preceding Conclusion is inevitable. To ensure that the apprentice-in-school is adequately prepared for industrial experience, the proposed Australian Commission on Technical and Further Education should arrange a detailed inquiry into the technical education presently provided for apprentices in technical colleges, the implications for TAFE of longer schooling for the 15-19 years age group prior to entering the labour force, and how current and future needs in the trades affect the adequacy of existing arrangements; it should also seek the collaboration of all relevant labour authorities, TAFE teacher bodies, employer organisations, trade union bodies, and professional institutions for the purpose.

(64) There is a significant proportion of upgraded tradesmen in skilled occupations who are without the advantages of education in the theory of their trades. These mature and recognised tradesmen should have special opportunities to acquire such education, and TAFE authorities should make the appropriate provision although not necessarily restricted to the Trades Stream of studies.

(65) The proposed Australian Commission on Technical and Further Education should provide in its organisation for a continuing study of providing bodies for adult education which are not operated for profit and are either subsidised by governments or operating without subsidies, with a view to recommending financial assistance from the Australian Government to extend their activities.

(66) The proposed Australian Commission on Technical and Further Education should provide in its organisation for on-going consultations with other commissions on education as to ways and means of supporting government maintained or administered bodies whose activities contribute to the extension of the concept of recurrent education.

(67) The proposed Australian Commission on Technical and Further Education should arrange to study the role of TAFE institutions in trade union education, preferably in collaboration with the Interim Committee of the National Council on Trade Union Training and should respond sympathetically to requests from the proposed National Council for pertinent courses of instruction.

(68) The proposed Australian Commission on Technical and Further Education should invite proposals from TAFE authorities and other appropriate bodies for funds to conduct courses in financial and general management in industry specifically designed and appropriate for members of trade unions who may be called upon at some time to participate at management or board level of business-type enterprises. Before being submitted, such proposals should have been endorsed by the Trades and Labour Council or its equivalent in the respective States.

(69) TAFE institutions should make more provision for management training which deals explicitly with day-to-day management procedures and techniques and avoids any attempts to engage in the sophisticated theoretic work dealt with in universities and other private and governmental advanced schools of management. They should seek to concentrate on training suitable for small firms and consult the appropriate bodies in developing courses. The proposed Australian Commission on Technical and Further Education should propose a scheme of overseas scholarships.
for persons wishing to specialise in management training for small firms along the
lines of those available to graduates under the Overseas Fellowships in Management
Scheme.

(70) TAFE authorities should facilitate the implementation of the national
training and re-training schemes in the Australian Government’s manpower policies.
Recommended grants towards capital and recurrent expenditure should take this into
account, and future submissions from States should indicate any inadequacies in the
 provision and proposals for overcoming them.

(71) Technological change has, among other effects, led to a demand for better
educated personnel. ‘Years of education’ has become a significant criterion in job
selection, causing a subtle prejudice against less educated people for employment in
work where the level of education is not really important. The proposed Australian
Commission on Technical and Further Education should examine how the concept of
recurrent education can stem this prejudice.

(72) TAFE authorities should resist attempts to add to course content, increase the
length of courses, or raise entry requirements without incontrovertible evidence that
the skill involved justifies the change. The authorities should avoid changes that
unnecessarily raise the complexity of courses and thereby discriminate against
technically capable students whose interests or abilities are not suited to more
academic forms of education. The length of courses should be the subject of intensive
curriculum research, and initially an examination should be made of the justification
for the length of all courses extending beyond 500 hours. Justification for the length
of courses of less than 500 hours should also be sought at a later stage. The status of
formal qualifications earned by successfully reaching the standard of knowledge and
skill required should not be determined merely by the length of course.

(73) For the immediate future reliable comprehensive forecasts of shifts in
occupational skills are unlikely to be available. The proposed Australian
Commission on Technical and Further Education should therefore assist State
TAFE authorities in every possible way to strengthen their curriculum research units
to develop a facility to respond quickly to imbalances that appear in the labour
market.

Recommendations

(1) All recommendations concerning grants from the Australian Government for
purposes of recurrent or capital programs contained in this report refer to the period
1 July 1974 to 31 December 1975 both inclusive.

(2) $9.81 million should be made available for distribution among the States as a
general purpose recurrent expenditure grant and that a further $9.81 million should
be available which individual States may seek approval to apply to recurrent
expenditure purposes they specify, as follows:

xxxiii
Table 4.3: Recommended General Purpose Recurrent Expenditure Grant, 1 July 1974 to 31 December 1975 — Australia.

<table>
<thead>
<tr>
<th>State</th>
<th>Immediate Outright Grant ($ million)</th>
<th>Further Drawing Rights on Application ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>3.45</td>
<td>3.45</td>
</tr>
<tr>
<td>Vic</td>
<td>2.68</td>
<td>2.68</td>
</tr>
<tr>
<td>Q'ld</td>
<td>1.62</td>
<td>1.62</td>
</tr>
<tr>
<td>SA</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td>WA</td>
<td>0.78</td>
<td>0.78</td>
</tr>
<tr>
<td>Tas</td>
<td>0.39</td>
<td>0.39</td>
</tr>
<tr>
<td>All States</td>
<td>9.81</td>
<td>9.81</td>
</tr>
</tbody>
</table>

55 per cent, approximately, of the sum of the amounts in columns (1) and (2) should be available to the respective States for expenditure at their discretion without prior reference to the proposed Commission. This expenditure, however, includes travel of staff to attend interstate meetings arranged by the proposed Australian Commission on Technical and Further Education, extra staff for existing libraries, additional ancillary staff for colleges, general research, consumable materials for workshops and laboratories, an advisory service to industry on TAFE and such other matters as the separate TAFE authorities deem necessary.

The remainder of the grants under column (1) and column (2) are intended to be used for the purposes listed below. The proposed Commission should be prepared to discuss with each State variations in the proportions or sums within the total specified, provided programs are instituted to achieve the objectives laid down in this report.

- 10 per cent for curriculum research and development, specialist job analysts to ensure relevance of courses to occupations, staff and travel expenses for interstate meetings, determining national lists of interstate equivalence of award qualifications;
- 10 per cent for the training of professional staff for libraries, library resource materials and equipment as indicated in Recommendations (12) and (13);
- 7 per cent for the development of a central resource centre, external studies activities, research into and production of self learning aids, facilitating the mobility of tutors to students and vice versa;
- 5 per cent for publicity and measures to raise the level of community awareness of the availability of technical and further education in all its forms and by all its methods;
- 2 per cent for counselling services and social work;
- 1 per cent for staff to direct and oversee safety, health and welfare in individual colleges;
- $120,000 by New South Wales, $66,000 by Victoria, $24,000 by Queensland, $24,000 by South Australia, $28,000 by Western Australia, $8,000 by Tasmania, for in-service training of non teaching staff;
- Of the remainder $200,000 by New South Wales, $200,000 by Victoria, $100,000 by Queensland, $100,000 by South Australia, $100,000 by Western Australia and
$70,000 by Tasmania should be used to appoint additional staff to form a unit to develop educational specifications for buildings, site plans and master plans for capital works development and redevelopment, and to contain special staff for statistical collections relating to the student and teacher population and related matters.

(3) A specific purpose recurrent expenditure grant of $1 million should be made available to the States to work towards furthering the concept of recurrent education and unrestricted access to vocationally oriented education, of which a minimum of 10 per cent should be earmarked for assistance to handicapped persons and a further minimum of 10 per cent to develop facilities to alleviate barriers to access discouraging ethnic groups, including means of converting overseas qualifications to local equivalents. The specific purpose includes the easing of entry requirements for courses, access to assessments or awards of qualifications without requirement for formal class attendances, extension of preparatory, bridging, transfer, and other courses for educational assistance, including meeting adult needs related to primary and secondary schooling. The distribution should be as follows:

Table 4.4: Recommended Specific Purpose Recurrent Expenditure Grant, Recurrent Education and Unrestricted Access, 1 July 1974 to 31 December 1975 — Australia.

<table>
<thead>
<tr>
<th>State</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>390,000</td>
</tr>
<tr>
<td>Vic</td>
<td>280,000</td>
</tr>
<tr>
<td>Q'ld</td>
<td>150,000</td>
</tr>
<tr>
<td>SA</td>
<td>90,000</td>
</tr>
<tr>
<td>WA</td>
<td>60,000</td>
</tr>
<tr>
<td>Tas</td>
<td>30,000</td>
</tr>
<tr>
<td>All States</td>
<td>1,000,000</td>
</tr>
</tbody>
</table>

(4) That a special inquiry into initial teacher preparation for technical and further education be jointly arranged by the Australian Commission on Advanced Education and the proposed Australian Commission on Technical and Further Education, and that the inquiry present its conclusions towards the end of March 1975.

(5) A specific purpose recurrent expenditure grant should be made available to the States for the sole purpose of in-service teaching staff development programs as follows:

Table 4.5: Recommended Specific Purpose Recurrent Expenditure Grant, In-Service Teaching Staff Development, 1 July 1974 to 31 December 1975 — Australia.

<table>
<thead>
<tr>
<th>State</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>930,000</td>
</tr>
<tr>
<td>Vic</td>
<td>400,000</td>
</tr>
<tr>
<td>Q'ld</td>
<td>300,000</td>
</tr>
<tr>
<td>SA</td>
<td>350,000</td>
</tr>
<tr>
<td>WA</td>
<td>330,000</td>
</tr>
<tr>
<td>Tas</td>
<td>90,000</td>
</tr>
<tr>
<td>All States</td>
<td>2,400,000</td>
</tr>
</tbody>
</table>
(6) $20 million should be available for distribution among the States in reimbursement for abolition of fees in technical colleges over the 3 six-monthly periods beginning 1 July 1974, 1 January 1975 and 1 July 1975 respectively, in appropriate instalments. The proposed Australian Commission on Technical and Further Education should by 1 April 1975 recommend adjustments, by an increase or reduction, of the instalment by the six months beginning 1 January 1975, according to actual relevant experience and statistics for the whole of the calendar year 1974. The proposed Commission should invoke Recommendation (30), Paragraph XXIX if appropriated funds prove inadequate.

(7) The proposed Australian Commission on Technical and Further Education should develop an appropriate formula under which the Australian Government could provide, by means of recurrent expenditure grants to the States, finance to be used for purposes to which technical college fees were applied during the year ended 31 December 1973. The formula should result in annual grants for each State not less than the finally adjusted grants for the calendar year 1974, as determined by Recommendation (6), but not necessarily in the proportion each State's grant bore to the grants for other States.

(8) $56,000 should be made available for distribution among States wishing to prepare proposals for community colleges and schemes for financial assistance. Proposals should include arrangements for a Community College Council, provision for a wide range of preparatory and bridging courses, courses for adults, including primary and secondary schooling, and liaison arrangements with other post school institutions in the State with complementary programs. The drawing rights for each State should not exceed $16,000 for New South Wales, $12,000 for Victoria, $8,000 for Queensland, $8,000 for South Australia, $8,000 for Western Australia, $4,000 for Tasmania. The proposed Australian Commission on Technical and Further Education should discuss State proposals with other education Commissions, as appropriate.

(9) States individually should be invited to design to the pre contract stage one model Library Resource Centre in an established technical college with an enrolment of not less than 1,000 students, and seek approval for the project to proceed. $200,000 should be available for distribution among the States for planning purposes, on request.

(10) $0.56 million should be provided for the improvement of existing LRC accommodation in those colleges with library staffs which are not covered specifically by other building proposals, as follows: $180,000 New South Wales, $135,000 Victoria, $130,000 Queensland, $55,000 South Australia, $45,000 Western Australia and $15,000 Tasmania.

(11) Each State should develop a program for LRC construction for discussion with the proposed Australian Commission on Technical and Further Education as a guide to LRC provision in future triennia. The proposed Commission should make provision in its organisation for advice on these matters to be available to the States on request.

(12) Funds should be earmarked from general purpose recurrent expenditure grants for the acquisition of library resource materials and the associated equipment in technical colleges. Priority in allocating subsequent grants among individual colleges should be given to those with full time library staff. States should be encouraged to take immediate steps to improve the LRC staffing levels.

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(13) States should arrange training to increase professional staff available for libraries in TAFE institutions. The numbers offered training immediately should not be less than 10 in New South Wales, 10 in Victoria, 5 in Queensland, 5 in Western Australia, 5 in South Australia, and 2 in Tasmania and funds should be earmarked accordingly from general purpose recurrent expenditure grants.

(14) An initial grant of $25,000 should be offered to each of the States to train library technicians for technical college libraries and the States should be invited to submit proposals indicating their needs for additional staff and the likely cost.

(15) The States should be assisted financially to carry out feasibility studies and cost-benefit analyses of the establishment of bibliographic centres, and submit any resulting proposals. $20,000 each should be granted to New South Wales and Victoria for this purpose, $15,000 each to Queensland, South Australia and Western Australia, and $10,000 to Tasmania.

(16) The finance earmarked in Recommendation (2) to develop central resource centres should have special regard to library needs of external students.

(17) An Australian TAFE Technology Centre should be established as a company limited by guarantee for the purposes of adapting technology to vocational education, and of researching, developing and producing learning and other educational aids by itself or through others. The Centre should also serve as the clearing house for relevant research, disseminate information from abroad, commission relevant research, publish a journal, arrange when appropriate for the publication of text books, admit for periods of training administrators and other persons with experience in technical and further education, and arrange such other matters as may be desirable from time to time. Finance should be provided through the Australian Minister for Education in such a way as to make the Centre financially accountable to him, but otherwise the company should operate on business like lines and attempt to break even on production activities.

(18) $100,000 should be made available for special purpose research into determining factors underlying the effectiveness of current practices and techniques of external studies. Proposals for such research should be invited immediately from relevant research organisations, academic institutions, and government departments or authorities, and assessed by the proposed Australian Commission on Technical and Further Education.

(19) An initial sum of $300,000 should be made available for research into technical and further education as follows:
   (a) Topics selected by the proposed Australian Commission on Technical and Further Education as being of major importance should be publicised and the bulk of the research grants allocated to researchers interested in pursuing any of these projects;
   (b) To ensure that emerging problems receive attention a general invitation should be given to any qualified person interested in conducting research in any aspect of TAFE, and a specific invitation to teachers;
   (c) Staff in the colleges should be encouraged to participate in research projects initially perhaps as co-workers with experienced researchers;
   (d) Some long term funding arrangement should be investigated to ensure that qualified and experienced workers are not lost to the area at the end of particular projects.
(20) $150,000 should be made available to TAFE authorities in the States upon application to the proposed Australian Commission on Technical and Further Education for the purpose of training technical college teachers in research methods.

(21) Each State should be entitled to a matching grant, on a dollar for dollar basis, for funds expended from its State resources on capital expenditure in excess of the following amounts. This grant is for capital expenditure on TAFE institutions and should be wholly at the discretion of the State concerned.

Table 4.7: Matched Capital Grants — Amounts in excess of which Dollar for Dollar Matching is Recommended for Period 1 July 1974 to 31 December 1975.

<table>
<thead>
<tr>
<th>State</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>6.000</td>
</tr>
<tr>
<td>Vic</td>
<td>4.500</td>
</tr>
<tr>
<td>Q’ld</td>
<td>2.200</td>
</tr>
<tr>
<td>SA</td>
<td>1.500</td>
</tr>
<tr>
<td>WA</td>
<td>1.200</td>
</tr>
<tr>
<td>Tas</td>
<td>0.400</td>
</tr>
</tbody>
</table>

(22) An Australian Government grant of $50.266 million should be made available to the States for the purposes of capital expenditure of which $15.087 million should be devoted to expenditure solely on equipment and minor works other than as part of new building projects.

(23) The $15.087 million referred to in Recommendation (22) should be distributed among the States for expenditure on equipment and minor works as follows:

Table 4.8: Recommended Distribution of Capital Grant for Equipment and Minor Works, 1 July 1974 to 31 December 1975.

<table>
<thead>
<tr>
<th>State</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>4.758</td>
</tr>
<tr>
<td>Vic</td>
<td>4.000</td>
</tr>
<tr>
<td>Q’ld</td>
<td>1.800</td>
</tr>
<tr>
<td>SA</td>
<td>1.767</td>
</tr>
<tr>
<td>WA</td>
<td>1.702</td>
</tr>
<tr>
<td>Tas</td>
<td>1.060</td>
</tr>
<tr>
<td>All States</td>
<td>15.087</td>
</tr>
</tbody>
</table>

(24) Gifts to TAFE type institutions for the provision of capital equipment should be recognised for taxation purposes identically with gifts for similar purposes to colleges of advanced education.

(25) The Australian Government should make the remaining $35.179 million out of the $50.266 million referred to in Recommendation (22) available to the States for capital expenditure on land and buildings in the following manner:
Table 4.9: Recommended Distribution of Capital Grant for Land and Buildings, 1 July 1974 to 31 December 1975.

<table>
<thead>
<tr>
<th>State</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>13.170</td>
</tr>
<tr>
<td>Vic</td>
<td>9.938</td>
</tr>
<tr>
<td>Qld</td>
<td>4.800</td>
</tr>
<tr>
<td>SA</td>
<td>3.313</td>
</tr>
<tr>
<td>WA</td>
<td>2.900</td>
</tr>
<tr>
<td>Tas</td>
<td>1.058</td>
</tr>
<tr>
<td>All States</td>
<td>35.179</td>
</tr>
</tbody>
</table>

These sums should represent the value of projects for land and buildings which may be undertaken during the 18 months' period. The actual cash demand for this purpose should be determined in the light of progress made.

(26) 1½ per cent of the total grant to each State for capital expenditure on land and buildings should be available as soon as practicable to the State for use specifically by TAFE authorities for master planning purposes.

(27) 10 per cent of the total capital grant to each State for land and buildings should be earmarked specifically for architectural project design to the pre contract stage and made available progressively as soon as master plans are agreed with the proposed Commission on Technical and Further Education.

(28) The proposed Australian Commission on Technical and Further Education should be satisfied with the provisions incorporated in the detailed design before recommending a specific building project to the Minister for the allocation of funds.

(29) The Australian Government should make the sum of $4 million available for the provision of student residentials and that TAFE authorities in the States be invited to submit proposals for construction projects.

(30) The proposed Australian Commission on Technical and Further Education should adopt the following principles:

**General**

Reference to the 'Minister' means the Australian Minister for Education, except where otherwise indicated. Reference to the 'Commission' means the proposed Australian Commission on Technical and Further Education (ACOTAFE).

(1) The Commission should:
   (i) invite proposals progressively for the development of technical and further education from appropriate authorities in the States and the Australian Territories;
   (ii) from time to time, publicly invite the community, technical college teachers, industry, social services, and special purpose organisations to advance views to the Commission on any aspect within its terms of reference;
   (iii) make continuing opportunities to visit appropriate colleges, institutions and facilities and to hold discussions with appropriate government and other authorities in the States and Australian Territories.

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Visits to institutions should be arranged with the co-operation of the appropriate authorities in the States and Australian Territories. The Australian Government should regard it as a direct responsibility of the Commission to make such visits and to hold such discussions as it considers necessary.

Authorities and institutions recommended by the Commission for financial benefits should be those whose maintenance or administration are consistent with its terms of reference.

Recommendations as to the allocation of funds to the States for particular authorities, institutions and purposes concerned with technical and further education should be aimed primarily at meeting the educational needs of people as individuals in the different regions of Australia, within the context of employment opportunities in industry, commerce and government, and existing and future manpower requirements.

To assist the Commission in furnishing information and advice to the Minister as to the amount and allocation of financial assistance in accordance with its terms of reference, each State should be asked to nominate its preferences on needs and on priorities. In submitting their separate proposals the States should be asked to state a case for their priorities.

Except for the 18 months' period from July 1974 to December 1975, the financial needs of technical and further education should be reassessed each year for three years ahead.

In legislation for formal triennia a clause should be included to avoid interruption to cash flows to the States, especially when the Minister is confident that the payment of an amount to a State, after the period to which the Act applies, will be used for the purpose of meeting commitments undertaken during the period of the Act.

States should be assured that once Australian Government finance has been made available for any project approved by the Minister that project will be financed to the extent of the Minister's approval.

As evidence of capacities in developing technical and further education relative to funds provided by the Australian Government, the States should be requested to report each December as to the actual distribution of the expenditure of these funds and in a form that will enable comparisons to be made of uses of the funds over periods of time.

The Commission should be influenced in its recommendations as to total funds to be made available and funds to be made available for each State, by the States' demonstrated capacity to organise expenditure to the extent of funds allocated for a triennium.

The Commission should feel free, in the light of prevailing economic circumstances, to make recommendations concerning additional grants during a triennium to each State which demonstrates a capacity to organise expenditure beyond the funds allocated for that triennium.

In addition to proposals from the States, the Commission should, at its discretion, initiate or consider proposals which it regards as necessary or desirable for the balanced development of technical and further education throughout Australia.

Types of courses which should be recommended to the Minister by the Commission for financial support should be those which are consistent with needs
and priorities as determined by the Commission. Where financial support is recommended for types of courses similar to those in colleges of advanced education, the level of support should be comparable with that in colleges of advanced education but the Commission should consult regularly with the Australian Commission or Advanced Education to avoid duplication of funding, in whole or part.

(XII) All Australian Government finance should be channelled through the Commission, whatever the courses being funded, when TAFE authorities are responsible for the institutions concerned. ACOTAFE approval of proposed funding for TAFE courses in institutions which receive Australian Government finance through other Commissions should be obtained before the proposed funding becomes effective.

Capital Expenditure

Sites

(XIII) The Commission should consider proposals for the purchase of land for use for or by institutions of technical and further education. Recommendation for purchase of any site should carry no implication as to the priority to be accorded to any subsequent building proposed.

(XIV) In making recommendations concerning the development of new sites, and the redevelopment or extension of existing sites, the Commission should assure itself of the appropriateness of the site, and the nature of the proposed development, having regard to the technological, sociological and cultural needs of the area and of the needs of teachers and of students. In this regard, in addition to the educational needs of the students and community, the Commission should have regard to the adequacy of the intended provision for:

(i) staff facilities, student residentials;
(ii) library resource centres, provision for central halls, theatres, food services, etc.;
(iii) sporting and recreational facilities;
(iv) transport — access to public transport to and from work place or home, provision for parking;

and the timing of such provision in the development or redevelopment of the site.

Buildings

(XV) Recommendations for the approval by the Minister of building proposals should be for specific projects.

(XVI) (i) At the discretion of the Minister, on the advice of the Commission, approval should be available for expenditure on the designing to the precontract stage of a building or a collection of buildings whose master plan has been agreed with the State concerned.

(ii) No additional money from Australian Government sources should be available for use on such projects until appropriated by the Parliament.

(XVII) The Commission should consider proposals for student residentials in both city and non urban areas on the basis that the Australian Government would provide the funds for both capital and recurrent expenditure. These should be funded, at the Minister's discretion, in all other ways on the principles applied in respect of colleges of advanced education.

(XVIII) Legislation for the provision of funds by the Australian Government for technical and further education should provide the Minister with the power to
approve, on the advice of the Commission, the transfer of capital funds between approved projects within a State, and between States, if the States concerned seek or agree to these transfers.

(XIX) The Australian Government should be prepared to consider, on the advice of the Commission, supplementary submissions for additional capital funds required because of cost escalation factors during the course of a triennium.

(XX) The Australian Government should be prepared to consider, on the advice of the Commission, supplementary submissions for additional capital funds required because of unforeseen changes in contracting and like circumstances.

Equipment

(XXI) The Commission should recommend grants, as appropriate, for the purchase of new or replacement equipment for technical and further education institutions, in both new and existing buildings.

(XXII) Moneys available resulting from recommendations of the Commission and moneys available from other sources of finance from the Australian Government should not be combined to purchase equipment even though such equipment may be suitable for multi level education programs.

(XXIII) Equipment for a new building necessary to make it a 'going concern' should be regarded as capital expenditure irrespective of the value of the individual items, but not beyond the end of the triennium following the triennium in which the building was completed.

(XXIV) There should be separate approval from the Minister for any single item of equipment costing $20,000 or more, whether for a new or existing building (items costing less than $20,000 should be treated in aggregate). The nature of equipment purchased should be at the discretion of the States, but should be justified in terms of relevance to the teaching/learning process.

(XXV) Funds made available as capital grants should not, under any circumstances, be applied to recurrent or maintenance expenditure.

Other Works and Services

(XXVI) Subject to what follows, States should be permitted to incur expenditure on projects costing less than $20,000 individually, within a total grant, after they receive advice that funds for the purpose have been appropriated by the Parliament for use by the Australian Government. Continued application of this principle should be reviewed in the light of annual statements for record purposes from the States, showing the distribution, by projects, of such expenditure approved by the State Minister or Ministers concerned.

(XXVII) All other moneys appropriated under this heading will be for specific projects approved by the Minister.

Recurrent Expenditure

(XXVIII) Legislation for the provision of funds by the Australian Government for technical and further education should provide the Minister with power to approve, on the advice of the Commission, the transfer of funds for recurrent expenditure between specific and approved programs in a State and between years within the triennium.

(XXIX) The Australian Government should be prepared to consider, on the advice of the Commission, supplementary submissions for additional funds for recurrent
expenditure required because of cost escalation and other unforeseen circumstances, during the course of a triennium.

(XXX) On the advice of the Commission, special grants to the States should be considered on the basis of need for the purchase of library books and library material for approved institutions.

(XXXI) Library funds provided by the Australian Government should not be available to purchase multiple copies of standard text books.

(XXXII) On the advice of the Commission, funds should be considered for co-ordinated programs of research into technical and further education.

(XXXIII) The Minister, on the advice of the Commission, should consider making funds available for hiring equipment, including the use of computers.

(31) The structure of the proposed Australian Commission on Technical and Further Education should provide for five standing committees as follows: finance, research and libraries, statistics and occupational trends, course development, and buildings and equipment.
Summary of recommended capital and recurrent expenditure grants
RECOMMENDED RECURRENT EXPENDITURE GRANTS IN THE STATES (1 JULY 1974 TO 31 DECEMBER 1975)

GENERAL PURPOSE SUM AND EARMARKED AMOUNTS

<table>
<thead>
<tr>
<th>State</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>$6.90M</td>
</tr>
<tr>
<td>VIC</td>
<td>$5.36M</td>
</tr>
<tr>
<td>QLD</td>
<td>$3.24M</td>
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<tr>
<td>SA</td>
<td>$1.78M</td>
</tr>
<tr>
<td>WA</td>
<td>$1.56M</td>
</tr>
<tr>
<td>TAS</td>
<td>$0.76M</td>
</tr>
<tr>
<td>AUST</td>
<td>$19.62M</td>
</tr>
</tbody>
</table>

For use at the discretion of TAFE authorities but includes ancillary staff in Colleges and libraries, general research, consumable materials for workshops and laboratories, TAFE advisory services to industry.

SPECIFIC PURPOSE SUMS

- In-service teacher education
- Libraries - additional to the $1.98M earmarked from general purpose recurrent expenditure grant
- Towards unrestricted access
- Research
- Community college proposals only

$20.000M Technical training fees reimbursement

Earmarked amounts or percentages are subject to variations within their total by agreement between the proposed Commission and the States concerned.
### RECOMMENDED CAPITAL EXPENDITURE GRANTS
(1 JULY 1974 TO 31 DECEMBER 1975)
($millions)

#### Allocated Grants

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land, buildings, and design</td>
<td>$35.179m</td>
</tr>
<tr>
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<td>Equipment and minor works</td>
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<tr>
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<td>Residential (unallocated)</td>
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<td>Possible matched sums (unallocated)</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$60.266m</strong></td>
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#### Allocated Grants by State

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Total allocated $50.266m
# 1: CONCEPTS AND GOALS

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<td>A Shift in Emphasis</td>
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1.1 The pattern of post secondary education in government administered or maintained institutions consists of universities, colleges of advanced education, technical colleges, adult education centres and like institutions.

1.2 Technical and further education is available from all of these institutions. Thus, for example, the intensive vocational training of technologists — such as engineers, dentists, physicists and medics by universities, contradicts the general impression of universities as being ivory towers of liberal study and research; it destroys the myth, too long perpetuated, that a university education necessarily excludes vocational training as one of its aims.

1.3 It is much easier to pick out the broad category of education to which vocational education belongs, than it is to draw precise dividing lines between it and other categories.

1.4 This Committee is concerned, however, only with the relevant government institutions not covered by the Australian Universities Commission and the Australian Commission on Advanced Education.

1.5 There are ILO and Unesco recommendations concerning technical and vocational education and training, and to meet these the scope of technical and further education must at the very least be:

(a) all forms of education provided in post school or other educational institutions by means of which individuals equip themselves for the exercise of occupations in such fields as industry, agriculture, commerce, and community services, and

(b) all adult education designed to prepare or retrain any person for employment, change of employment or promotion within employment in any branch of economic activity.

1.6 Vocational education and training, being part of the total educational process, is embraced by the Unesco definition of education which 'refers to all types and levels of education, and includes access to education, the standard and quality of education, and the conditions under which it is given'. This definition is recorded in the 'Convention against Discrimination in Education' adopted by the General Conference of Unesco at its eleventh session.

1.7 In the Committee's view, however, prevailing public thinking about TAFE in Australia does not yet accord with 1.6. The dominance of the economic growth theme, the historical origins of technical education, traditional distinctions between 'liberal' studies and practical skills all cause technical or vocational education to remain associated with the education system without being recognised as an integral part of it. Training in skills outside universities (and now perhaps colleges of advanced education) is not usually admitted as 'education', least of all by educators who still believe they are teaching 'education for its own sake' unrelated to worldliness.

1.8 The Committee noted the Unesco use of the description 'technical and vocational education' for its recommendations, and the ILO use of 'vocational training'. It believes that Australian practice confirms that the term 'technical education' alone has too confined a common meaning to include the wide range of educational offerings now available from some technical colleges. The South Australian Government created a Department of Further Education in 1971 whose functions embrace 'adult education' as well as 'technical education'. In Western Australia, the Technical Education Division of the Education Department has virtually the same scope of
activities as has the Department of Further Education in South Australia. The New South Wales Government announced in 1971 its intention to rename the Department of Technical Education, the Department of Technical and Further Education.

1.9 The nomenclature is not an exercise in semantics. It acknowledges these facts: an extension of appropriate education to prepare for jobs, whether 'technical' or otherwise; the labour force trends that show that people are taking advantage of the growing range of available occupations; and the relative increase of occupations for which cognitive skills are essential and which require education in its total sense.

1.10 'Further education' is of British origin, where it is used as a general term to embrace types of educational institutions rather than types of instruction, and appears to be an alternative to 'technical education'. The institutions so described are technical colleges, or their equivalents, conducted mainly by local education authorities which come under the Further Education Regulations of the Department of Education and Science. The title 'college of further education' in Great Britain is normally confined to colleges offering courses at the lower academic levels.

1.11 Many Submissions to the Committee have tended to interpret 'technical education' as confined to manual type occupations, 'further education' as relevant to white collar occupations, and 'adult education' as is generally understood. The Committee favours the use of the term 'further education' to embrace all forms of vocational and adult education within its terms of reference. It is of the view, however, that it would take time for general acceptance. The Committee, therefore, looks forward to its substitution for 'technical education' no later than 1980, and until then would hope that the States would make the public familiar with the term 'further education' as well as with 'technical education'. The intervening period would be useful for testing a number of related changes which the Committee will be suggesting.

1.12 Although an appealing practical expedient, the British practice of describing the scope of technical and further education by institutions does not commend itself to the Committee. As already indicated, the scope of technical and further education is much wider than courses of instruction available in technical colleges, agricultural schools and like institutions.

1.13 The Committee has noted Submissions alleging that imprecision in the definition of the scope of TAFE could continue to create 'confusion'. One writer said, 'The distinctions between universities and colleges of advanced education are becoming troublesome; the distinctions between colleges of advanced education, technical colleges and technical schools are no less troublesome'.

1.14 The Committee does not attach any importance to precise distinctions between institutions. Overlapping of courses as between secondary schools and technical colleges and as between technical colleges and colleges of advanced education could be beneficial. Such overlapping could allow adults greater access to recurrent education. This is especially so in relatively large non metropolitan areas which would be well served by community colleges providing opportunities for adults to satisfy their educational needs. These needs may be met by normal technical courses, courses to remedy deficiencies in their initial education, or courses extending into streams of advanced education where the number of local students justifies it.

1.15 The Committee is critical of any practice which uses availability of Australian Government funds as a basis for classifying courses. In its view courses must be strictly classified according to educational criteria.
1.16 The Committee received suggestions for a definition of 'further education' using vocational and non vocational 'objectives' and 'intentions' as the criteria, thus enabling a distinction to be made between 'technical' and 'adult education'. After examination, however, the Committee concluded that the ever widening scope for occupations and the time element that affects people's stated intentions renders such an approach impracticable. It believes that it is beyond human capacity to devise a precise definition of technical or further education that would stand the test of time. And, in any case, there appears to be no compelling reason to seek such a definition.

1.17 The Committee, therefore, prefers simply to describe the activities of technical and further education as presently practised in Australia. The practice is wider than described in 1.5 and is that education by means of which the individual can:

(a) acquire or make progress towards acquiring, by full time or part time studies, assessable occupational qualifications involving mental, manual or social skills; and/or

(b) acquire or seek to acquire, usually on a part time basis, knowledge or skills for secondary, additional, or supplementary occupational purposes, or for the purpose of personal development or enrichment, or to utilise leisure creatively.

The essential characteristic that distinguishes (a) from (b) is the formality of occupational qualifications acquired and its relevance to immediate employment purposes. Courses consistent with (a) are usually available in technical college type institutions where formal evaluation criteria are normally used; courses consistent with (b) are usually less formal and described as adult education, and are frequently available in technical colleges.

1.18 The educational options in institutions within the formal and non formal TAFE patterns are:

(a) apprenticeship and post apprenticeship courses;
(b) various non indentured courses for skilled workers;
(c) certificate and sub diploma courses for technicians in manufacturing industries and similar level courses for persons in commerce, community service, rural, mining, artistic, and other industries;
(d) courses which can lead to full professional status or which enable professionals to update their technology or to specialise;
(e) courses which can be broadly described as preparatory or bridging, that is, leading to higher courses of study, or short courses in job skills or particular kinds of knowledge;
(f) courses of an informal kind and varying in length from a number of years to quite short periods in any aspect of technology, science, liberal studies, self expression, home handicrafts and cultural appreciation.

Options (a) to (e) match 1.17(a) and (e) and (f) match 1.17(b), the overlaps being obvious.

1.19 In the last quarter-century there has been much greater voluntary participation in education by young people and adults beyond the compulsory schooling age. Equally significant is the fact that all forms of education have become more closely related to employment, modifying the concept of education as intellectual development for its own sake.

1.20 Artificial barriers between general and vocational education, however, still remain. Some general education proceeds as if there were no world of work. Some vocational education is specialised training, concerned more with the skill than the
It is the view of the Committee that general and vocational education should not be artificially separated. Most forms of general education are vocational for at least some students. Again all vocational education affects the learner as a person and therefore has some general educational effect. The implication for vocational education is that training in the narrow sense can be a serious disadvantage for the student, both in terms of personal development and in acquiring the basic understanding that is needed for continuing education, and for acquiring other vocational skills. The Committee sees a need for a growth in the number of vocational education courses which take these considerations into account in such a way that the relevance of the course to the student is enhanced, and that the broader concept of the 1973 ACTU Congress policy decision is applied, namely — ‘provision to be made in technical education courses for subjects which will enable participants, in addition to achieving technical competence, to take their place in society as better citizens’.

RELEVANCE TO EMPLOYMENT

1.21 People who seek or gain qualifications from technical colleges do so mainly to enhance their job prospects. They assume that course content is vocationally relevant, at least up to date technologically and socially, and perhaps even ahead of general practice in industry, commerce, and community services.

1.22 Industry and the community have similar expectations in this respect. They assume that vocationally oriented courses are being designed in terms of industry’s job requirements, and for the growing but specific job requirements of the several branches of community service.

1.23 Technological, social and structural changes in industry shift the pattern of the demand for manpower, causing new employment opportunities to emerge and some existing opportunities to shrink. Over the last 20 years, new employment opportunities in audio-visual communication, computers, automatic tooling and equipment in the manufacturing and building industries, and in community services — to name a few — have led to the emergence of types of job not previously known, and it is certain that the year 2000 will provide employment opportunities in occupations not dreamed of today.

1.24 Changes that have taken place, and are still occurring, in the population and structure of industry and in the pattern of occupations in Australia are discussed in Chapter 3. These changes have been absorbed without the economy’s record of full employment having been seriously challenged for any time.

1.25 Notwithstanding the record of full employment, many people change their jobs and the nature of their occupations a number of times during their working lives. Technological change affects employment levels, as evidenced on the waterfront, in mining, and other industries. The most severe impact is felt by middle aged and older persons who may have to learn new skills and fit themselves for alternative occupations. The Committee is of the view, however, that public utterances about technological change should avoid raising unnecessary doubts as to the viability of extended technical and further education and the worth of some careers requiring extended training, including apprenticeship. It believes that the possible effects of technological change on occupations underline its view that the concept of recurrent education must be implemented, that education and training must be continuously accessible to all, and that vocational education must contain the breadth that facilitates re-orientation of skills when the need arises.
1.26 In the main, semi skilled workers are the ones subject to most threat from technological and social change. The skilled, such as tradesmen and the para professionals, including technicians, have been much less vulnerable because their skills are transferable, with minor adaptation, over a range of industries and employment opportunities, although a few exceptions have been noted in printing, graphic arts, and related fields.

1.27 Social change is having a relatively marked effect on job opportunities, in that it is creating streams of new types of para professional employment — for example, technician jobs in medicine, dentistry and the professions generally. Child care centres and related community services also give rise to para professional employment and are associated with the increased participation of women in the labour force.

1.28 Colleges will need to consider the potential demand from individuals for suitable education and training in these occupations at the certificate level; given appropriate stimulus, demand at this educational level as a whole could grow more rapidly than most other levels combined (although enrolments in some particular subjects may fluctuate). This is discussed in Chapter 3.

1.29 The responsibility for vocational education does not and should not reside solely in the formal education system. This responsibility should be shared with industry, commerce and government which employ the output, and with the professional institutions and competent adult education bodies.

1.30 The future of TAFE will be influenced by the extent to which individual employers in industry, commerce and government provide related practical experience for full time students in certificate courses, and the extent to which they can provide day release, block release, or study leave for employees undertaking part time studies. These matters will in turn be affected by future patterns of working time arrangements.

1.31 The Committee is of the view that more resources should be devoted to curriculum research to ensure the relevance and modernity of course content. The sharing of responsibility for training with industry, commerce and community services is also important. The accumulation of theoretical knowledge and practical experience in industry should, with variations discussed in Chapter 3, be concurrent, and curriculum developers should seek industry’s co-operation for their effective co-ordination. There would be advantages in consistency of curricula in all States in major courses, and the Committee is of the view that the proposed Australian Commission on Technical and Further Education should work closely with States to achieve this.

1.32 The Committee believes it is not the function of education authorities to match numbers completing courses to the manpower needs of industry — their function is to ensure that the courses offered in further education institutions are directly relevant to particular occupations. Likewise, the systems of TAFE are not, as far as is known to the Committee, responsible for ensuring the structural mix or balance of the labour force — their responsibility is to see that the individual has access to the highest available standards of occupational excellence and relevance, whatever his or her chosen path of studies. The Committee believes, however, that educational authorities should continually be made aware of manpower trends and the changing context of local jobs.
1.33 Assessments of overall manpower needs are made by labour authorities, and published from time to time. The Committee has noted the stated intention of the Australian Minister for Labour to provide resources within his Department to attempt labour force forecasting.

1.34 There are no formal arrangements at national level and, apart from South Australia, no such arrangements at State level, for the exchange of labour force information between manpower and education authorities. At the national level the Australian Apprenticeship Advisory Committee and the National Training Council provide some potential for liaison and exchange of labour force data. The TAFE authorities may also seek information from the Australian Bureau of Statistics and other authorities. At the State level, South Australia has a newly formed Industrial Training Council which among other things will prepare manpower profiles on occupational groups for distribution to industry and commerce.

1.35 In most States the TAFE authorities use a system of industry committees to ensure the relevance and continual updating of course content to the modern technology. The Committee supports the use of such committees for reasons discussed in 2.52 and 2.54 and believes the proposed Commission should encourage research into their composition and effectiveness. It believes, however, that these committees are not a substitute for specialist staff.

1.36 Local bodies attached to colleges in non metropolitan areas are used in some States to advise on local manpower needs and the relevance of college courses to these job opportunities. This is realistic. The requirements for TAFE courses will differ among local communities according to their characteristics. The nature and distribution of vocational courses in a harbour town, for example, will expectedly differ from the local needs of a comparably sized inland town.

1.37 Notwithstanding the importance of local manpower needs, the Committee was impressed by representations that colleges in non metropolitan areas should offer wider vocational education so that young people in areas of limited job opportunity can move readily to other areas.

1.38 Mobility is also affected by the absence of national basic standards for levels of skills and accreditation of technical and further education. The Committee believes this gap has enough disadvantages to justify an attempt at publishing interstate equivalents of existing courses and of qualifications for employment purposes. (Such equivalents need not have identical terminology or syllabuses.) Reciprocal arrangements should be encouraged so that students — full time or part time — could get credit for completed equivalent units of study on transfer from one location to another.

1.39 There are demands for, and undoubted national advantages in, equivalence of qualifications and courses to the maximum extent in all States. The Committee believes that the proposed Commission should provide within its organisation for the preparation of ‘course equivalence’ lists to be drawn up in collaboration with the States. It also believes that States should be assisted financially, if necessary, to make curriculum changes to achieve equivalence with one another where this seems desirable.

1.40 The Committee is of the view that there should be provision in the organisation of the proposed Australian Commission on Technical and Further Education for liaison with manpower authorities in government, employer organisations, trade unions and other employee organisations. Further, the proposed
Commission should periodically make its views known, through publications, on the interrelation between occupational trends, community needs, and developments in technical and further education in the context of which individuals can plan to develop their potentialities.

**A SHIFT IN EMPHASIS**

1.41 One major organisation informed the Committee that the prime purpose of technical education is to anticipate and meet the vocational needs of the community. Technical education in Australia has tended to be seen in recent years as a system of vocational education and training to provide skilled and other manpower to meet the immediate and projected requirements of specific sectors of industry and commerce, serving as well to create opportunities for individual betterment, occupational satisfaction, and job enrichment. Appendix A shows that technical colleges and related institutions have attracted heavy and widespread support from the community, industry and commerce. The Committee believes that this is due to the apparent relevance of TAFE to people's concern with a worthwhile livelihood.

1.42 In 1959 at the 43rd session of the International Labour Conference in Geneva, the Director-General of the ILO said, inter alia, on page 71 of his report that there was a time when training was seen 'merely as a means of making available to undertakings the types of workers needed to meet their manpower requirements'. He said that preparation for work should include the whole man, and not merely his technical capacities.

1.43 With growing impetus, bodies of world stature, such as ILO, Unesco and OECD, are changing the emphasis in vocational education from primarily seeking to meet industry's needs for manpower to primarily meeting the needs of the individual person who wishes, within the limits of his capacity, to develop his abilities to the best advantage of himself and the community, including industry and commerce. The change is only one of emphasis, but is highly significant for those responsible for vocational education. The realities of job opportunities, the continually expanding demand for skilled manpower, and the relevance of courses to the actual content of occupations must, nevertheless, remain the context for the type of education offered in technical colleges.

1.44 Such a shift in emphasis would be an Australian acknowledgment that the manpower needs of industry in our kind of society can only be accommodated if the needs of the individual are met first; in a full employment society people unhappy in their jobs contribute strongly to labour turnover rates.

1.45 The personal hopes and occupational aspirations of some individuals may be unrealistic, or in a direction where employment opportunities are limited or contracting. While an individual's primary choice in education and training may serve his primary interest, it may be neither to his own nor the community's advantage that he pursue it if acceptable alternatives are available. These alternatives may be more realistic in terms of employment opportunities, without unduly frustrating this personal interest.

1.46 The problem of reconciling personal and public advantage is complex and not easily resolved. Its final resolution will not be found in this Report but the Committee believes it involves integrating adequate guidance and counselling services into the organisation of technical and further education, adopting modern technology for the purposes of learning, as discussed in Chapter 4, and placing as much emphasis on skilled teaching power as skilled manpower in other industries.
1.47 The shift of emphasis lifts the priority of social development in relation to economic growth, without understating or detracting from the importance of economic growth. Continually improving productivity is essential, not only to provide the wealth and material resources for social development but also to make it increasingly possible for people to be released from the workplace to take advantage of educational opportunities for personal development and betterment, as their vocational needs require.

1.48 In this country, more than in most others, economic growth and almost continuous full employment have gone hand in hand. The resultant rise in the incomes of individuals and of the community at large has led to changes in the structure of demand and to changes in thinking about social objectives and motivations.

1.49 Over the last decade and more, Australia has also seen confirmation of a basic psychological principle that as incomes grow human needs become more diverse. The individual has, as it were, a scale of needs, and as one type of basic material need is met others emerge.

1.50 The Committee believes that on both economic and psychological grounds new, but as yet unknown, social needs and motivations will be generated, and fairly soon. This presumption will especially affect all dimensions of education. The Committee believes that all parliaments in Australia can accept this view, although political differences within them may affect the practical timing of social change and the extension of educational opportunities.

1.51 Limited finance at one time or another has hampered all parts of the education system and the problem of priorities does not belong exclusively to TAFE.

1.52 Nevertheless, the Committee is of the view that a strong case can be built to support the contention in Submissions it received that technical education has carried a disproportionate burden. Hence TAFE has had a disparate share of the problems of priorities. The demand for education in all its streams will, of course, continue to grow for more reasons than simply population growth. It is unlikely, in the foreseeable future, that the available funds will keep pace with the ever-expanding requests of a society that will be increasingly thirsty for education. It is essential in the national interest, however, that TAFE's current disadvantages be removed and, where possible, its rate of development be increased. This is elaborated in Chapter 3.

1.53 As reported in Chapter 4, classrooms have received priority over student and teacher amenities, because of limited finance. Technical equipment has had priority over learning aids. Buildings have been more important than open breathing space.

1.54 A shift in emphasis giving priority to the educational needs of individuals should result in colleges with physical facilities that have much more regard for people's welfare, health and safety. It should also lead to policies that give individuals unrestricted access to the educational means of developing their capacities as they want it within the constraints discussed in 1.45.

1.55 TAFE should offer more options for the individual than merely job preparation. It should also provide an opportunity for the development of character and of understanding, judgment, self-expression and adaptation to varying environments, as urged by ILO and Unesco. If the system can do this, it will help individuals and the community to welcome technological and social change rather than fear its consequences, because they will be better equipped to cope with it.
The content of TAFE should try to ensure that the inevitable specialisation in particular occupations does not stifle broader interests. TAFE should be so organised that every person who so wishes, including the physically and mentally handicapped, can continue his education until his potentialities have been developed to the full.

The Committee's view is that the shift in emphasis to the individual requires a review and overhaul of policies, in some States more than others. This cannot be done by piecemeal tinkering with curricula.

**ACCESS TO TAFE**

**General Barriers to Access**

Access to technical education is less difficult than to many other forms of post school education because there is a wide range of courses, prerequisite barriers are minimal, and enrolment as a part time student is possible through various patterns of attendance.

In spite of this, there are still problems, but their nature is probably little understood. The barriers to access were for some individuals built in their early educational experience; for others the barriers exist for different reasons.

Some people were unable to cope with their early compulsory education, and the consequences have pursued them into adulthood, limiting their desire to seek and their capacity to perceive further educational opportunities. For others the system appears to retain the learning barriers they previously found insuperable and, regardless of a desire to improve their knowledge or broaden their skills, they continue to shy away from the educational process. Motivation appears to be inhibited by fear of the same failure experienced in the primary and secondary educational system.

Fear of the formal system of classroom lessons, study or homework, discipline, tests, and examinations which publicly exposed many students' apparent lack of ability, follows them into later life. The persistent barrier of formal prerequisites for entry or re-entry into education accentuates this fear. Against this background, the much vaunted 'adult entry' provisions to courses of study tend to identify those who gain such access as exceptions, and unwittingly reinforce the existing resentment of some people against the educational process.

In particular, formal prerequisites for entry or re-entry into professional courses which formerly had lower entry requirements, and the extension of the length of a number of para professional or middle level courses, deter some students who previously supplied industry and commerce with a range of skills and expertise.

There is a growing number of people who believe that access is limited not only by entry requirements but also by the absence of learning methods which give the individual the option of reaching for his goal in his own way and at his own pace.

There are some TAFE educators who do not appear to accept that the 'access' problem might respond to new approaches to generating educational motivation. Some claim that motivated people have adequate opportunities to improve their education already, and in fact continue to do so. Apart from some important exceptions, however, little attempt is made to provide the motivation for people to become interested in enrolling for courses of study. Some argue that the people/students with whom they deal do not want to discover knowledge for themselves but insist on being 'told' and spoon fed. This view implies that the typical technical education student would not or could not respond to opportunities for self learning.

This Committee is of the view that while this may be true for some students, apathy
in others is at least partly due to the restricted educational process through which they have been. Some teachers argue that post school students will not accept subject material that resembles the school's 3 R's, and that employers object to the inclusion of broad based education for the worker/student/apprentice and others, in courses at technical colleges. The Committee finds it disturbing that educators seem content to leave their approach unaltered for those reasons.

1.65 The Committee found that some TAFE institutions persist with many of the processes common to traditional secondary education — processes which assume that adult student needs are little different. The process still adheres to examination dominated curricula, teacher dominated learning in the traditional classroom style, and the maintenance of such suspect learning devices as compulsory class attendance.

1.66 Most college administrations wait for a demand for courses to arise spontaneously before making provision for them.

Access Curbed by the System

1.67 In all States, some more than others, there appears to be an inbuilt tendency for the education system to determine what students will do and what their vocations will be. The hierarchical channels of progress appear to favour scientific/academic students, perhaps the better than average school learners and those whose circumstances — social as well as economic — permit a prolonged school life.

1.68 The early school leavers who seek 'tech.' studies, the late developers who look to TAFE to improve their job prospects, and the fast learners attracted to the 'tech.' because of its reputation for practical education, often face problems of access to other institutions because of the general absence of credits for completed study. Tertiary institutions in the USA and Canada, and to a lesser extent in the UK, appear more ready to give credit to particular individuals for work undertaken elsewhere. It is a matter of regret that such credit is less readily given to individuals in Australia.

1.69 TAFE offers individuals additional educational chances within the existing system: for example, matriculation courses for adults, certificate courses and various non examinable courses. In technical college vocational courses, however, some educators maintain belief in an industry needs theme which tends to result in some programs being too narrowly oriented to immediate needs. That belief is strongly held, despite the almost continuous warnings of ILO, Unesco and labour market specialists in Australia, that narrow programs are, in the long run, self defeating to the individual.

1.70 In the Committee's view, an additional reason to 1.31 for further curriculum development in technical college type institutions is to keep open access to continuing or recurrent education. Terms like 'second chance' are to be avoided. To the contrary, the concept of recurrent education needs to be made popular so that individuals can move in and out of education streams according to needs, having as many opportunities as they can usefully experience. Curriculum development requires a realistic review of the content of many courses. Much specialised, time absorbing but infrequently used material should be removed. Courses should be reconstituted so that literacy in the broadest sense, special manual skills, and other skills merge in an obvious relevance to particular vocations, and to future educational options.

1.71 A combined trade union Submission, on behalf of the Australian Council of Trade Unions, Australian Council of Salaried and Professional Associations, and
Commonwealth Public Service Organisations made out a strong case to the effect that many people deny themselves access to further education lest they lose face by failing to cope with the educational process. The ACTU and ACSPA held that the 'workingman' would be more likely to avail himself of the further education which he may desire if it could be pursued among his peers. The trade union view that people should have access to the educational medium they prefer has led the Committee to conclude that there are advantages in aspects of TAFE being available through a variety of educational bodies not operated for profit.

1.72 The Committee is of the view that adult education should be regarded as an integral part of TAFE and of technical college activities. It recognises, however, that government administered or maintained bodies outside the State TAFE authorities also offer adult education courses; in some cases to a greater extent. In addition, there is a variety of voluntary bodies involved in adult education. It is important that access to adult education be as open as possible. Thus the Committee, while it would expect major assistance to be given to government administered or maintained bodies, believes that further consideration should be given to financial assistance for some voluntary bodies in specific instances.

1.73 The Committee believes that problems of access to educational opportunity have been too long ignored. Considerable research is needed into these problems, and the Committee would hope that researchers would give priority to testing the observations it has made and the validity of the views expressed above.

Awareness
1.74 Another dimension of the problem of access is the extent to which the community is aware of available educational opportunities. Advertising experts appreciate the importance of awareness and so constantly advertise products. It should be so with TAFE. The level of demand could well be related to the level of awareness of what is available, the sources of advice, and the ways in which people can enter particular courses without obligation and without embarrassment to them or their families.

1.75 Some States have done little or nothing about publicity other than sporadic announcements of new courses. The Committee is of the view that education providing bodies should do a great deal more to publicise what is available. Also, to continue the analogy with advertising, educators could do more to develop new products in anticipation, rather than waiting for a demand for courses to arise before making provision for them.

Discriminative Access
1.76 Trite though it may sound, it is useful to keep in mind that living itself contributes to education. There are people who develop some vocational skills naturally, without wishing to earn a living with all of them. Others pick up skills with one employer but are unable to gain formal recognition to practise elsewhere.

1.77 Discrimination in access exists in a wide range of TAFE courses but nowhere is this more evident than in access to the apprenticeship trades. On age grounds alone, access is restricted and adults are not encouraged to learn or practise a skill or to learn the theory. Courses in the apprenticeship trades are not freely open to adults and are not generally available at times convenient for adult attendance.

1.78 As is discussed in Chapter 3 in another context, the paradox is that many people who are denied access to trades training can gain recognition by being upgraded on the basis of job experience alone. In the engineering trades, for example,
which are covered by a Tradesmen’s Rights Regulation Act, evidence of six years’ employment in the trade, with at least 12 months’ continuous employment immediately preceding application, will win an adult certification as a tradesman. In the building industry, it is common knowledge that a person who can demonstrate practical proficiency to the employer and the trade union will seldom be denied a union ‘ticket’. The Committee can only speculate on the effect on quality of work in the building industry and metals industry where some tradesmen have been, and are being, denied supplementary but essential vocational knowledge.

1.79 Skilled trades access is restricted in another sense: a slavish adherence to the belief that all trades require the same time for practical and theoretical mastery when clearly the reality of the situation refutes this. Most formal training available is embodied in apprenticeship courses involving three years’ part time attendance at technical college and structured to suit long standing apprenticeship traditions instead of the changing uses of particular skills within the trades.

1.80 Government administered or maintained education authorities have a responsibility to provide appropriate education for all persons who may seek it, without discrimination. Trade courses for non apprentices, including interested adults, should be of no lower standard than is provided for apprentices, and should be developed to enable appropriate recognition by certification. Restrictions of employment opportunity, where they exist, should be considered by the Committees on Discrimination in Employment recently established by the Australian Government.

1.81 Another type of discriminative access is the requirement that people must enrol in a course with a particular institution in order to sit for that institution’s examination which bestows a vocational or other qualification. There are other ways in which people can prepare for an examination; many individuals can prepare by personal studies. The Committee has concluded that self learning whereby the individual can learn at his own pace, in his own time and within his own capacity, has tremendous advantage and must be facilitated. Self learning is how people cope with the business of living.

1.82 The usefulness of developing self learning opportunities and techniques, however, is severely handicapped unless the individual can gain recognition for his learning achievement. Like so many areas of education TAFE is constrained by such structural features as rigidly time tied courses and examinations, and the requirement that ‘the award of a certificate depends on adequate attendance as well as class work and examination results’, as announced in so many technical college brochures. In effect, recognition in proficiency of knowledge and competence of skills is made dependent on attendance at formal class work for a set period of time. The advantage claimed for these features is that they enable standards to be set. The major disadvantage lies in their inflexibility in that they do not allow for different rates of individual educational progress.

1.83 The Committee noted that this situation does not apply to Western Australia where any person can arrange to be tested at technical college examinations, regardless of where and how he or she received training.

1.84 TAFE administrators claimed to the Committee that class attendance is an essential part of learning social behaviour and developing social skills, is necessary for workshop and laboratory guidance, and enables the teacher to assess student competence more effectively by observation over a period of time than by sporadic test or examination. That attendance at classes can benefit many people is unarguable, but the Committee believes that adults should have the right to forgo
certain benefits as well as to have access to them. There are many ways in which technical education authorities unwittingly apply to adult education the authoritarianism inherent in the large scale education of children and youths. Required attendance is one such way. Non attendance at formal classes may involve the development of additional and alternative procedures for assessing proficiency.

1.85 The Committee's view supports the principle of encouraging the practice of recurrent education and self learning in TAFE.

Women

1.86 Submissions to the Committee drew attention to the relatively small proportion of women who are enrolled in technical colleges, in relation to that of men and boys. The Submissions claim, for example, that young men are encouraged to engage in technical education by access to apprenticeships, whereas women and girls have few such inducements. Despite innovations in a few progressive schools, students are still directed to 'subjects for boys' and 'subjects for girls' in various States. The Committee visited sections of colleges designated 'women's work' and 'secretarial studies for girls'.

1.87 The Submissions suggest that part of the problem lies with the relatively few women who are employed as teachers in technical colleges and with the relatively few women who are invited to participate as guest speakers supporting particular educational courses. The Committee felt that part may also lie with the notion that it is only boys and men who need career and vocational training.

1.88 This is a matter that extends far beyond this Committee's terms of reference since it overlaps the question of women in employment and society's attitudes towards women. Nevertheless, the Committee is of the view that it is a comment on the conservative nature of technical education and its tendency to follow and react rather than innovate. TAFE opportunities for women are discussed again in Chapter 3.

1.89 It should be the responsibility of TAFE institutions administered or maintained by a government education authority to ensure that they do not deny access to courses or subjects offered, on the grounds of age or sex. Discrimination against women can take the form of unavailability of suitable toilets, ablution facilities, safety clothing, and clothing suitable for women. They may be counselled away from certain courses during enrolment interviews and given low priority for entry into classes where the demand is higher than the available accommodation can sustain.

1.90 The Committee is of the view that the proposed Commission should make special provision within its organisation for continuous consultation with State authorities to remove any access problems women have to courses within technical and further education.

Country Areas

1.91 The Committee's attention was drawn to 'country areas' where there are problems of access to vocational education. These problems appeared mainly to result from too few people in one place to justify expensive educational resources within their immediate locality. Local industry and commerce may provide only a limited range of occupations and employment opportunities, and the distance from universities and colleges of advanced education restricts attendance at courses to those able and prepared to live away from home.
1.92 These problems are consistent with the 'industry needs' approach and the belief that courses in country centres should be restricted to those in which local employment is available. The effect of this is to steer some people into courses unsuited to their aspirations and ability or cause them to board in the nearest city in order to have access to the course they desire. The Committee believes that courses in country centres can be equally well justified on the basis of an individual's desire to study near home even though this may later mean leaving the area to obtain suitable employment.

1.93 The Committee is of the view that many of these problems could be alleviated by developing the concept of community colleges as discussed in Chapters 2 and 4.

Handicapped Persons

1.94 The Australian Council for Rehabilitation of the Disabled (ACROD) submitted that TAFE has contributed little to the rehabilitation of handicapped adolescents and adults. It informed the Committee that sporadic activities which had taken place had occurred through the interest of individual technical colleges or individual technical college staff members, usually stimulated by voluntary organisations.

1.95 The Committee has noted that TAFE authorities make no staff provision within their structures for continuous examination of the special needs of handicapped adults. The Committee considers that this omission should be remedied.

1.96 In fact, few handicapped persons study in technical college type institutions. In the Committee's view, the design of college buildings and facilities makes it difficult for physically handicapped people to move into and about the premises. More significantly, however, the student must fit into the technical college system whereas insofar as handicapped persons are involved, the college should provide for their special and individual needs.

1.97 The Committee has noted the activities of the Commonwealth Employment Service of the Australian Department of Labour in the placement of handicapped persons in work, the services of the Commonwealth Rehabilitation Service, the development of sheltered workshop employment, and the pilot preparation centre for mildly mentally handicapped school leavers being established by the Department of Social Security.

1.98 ACROD laid evidence before the Committee that many young people leave school with a disorder in one or more basic psychological processes involved in the understanding and use of spoken or written language. It argued that special learning difficulties which produce illiteracy often account for the inability of such young people to undertake further education and trade training which must be supported by technical education. ACROD submitted results of surveys indicating that as many as 15 per cent of children have learning disabilities, excluding another 6 per cent or so in slow learning classes.

1.99 In the school years when a child is failing to master basic learning skills he has an opportunity to get help, but on leaving school the opportunity ceases. Some experimentation, however, is under way towards providing post school assistance. In New South Wales the Departments of Education and of Technical Education have been conducting classes in technical colleges for people with learning disabilities. Some 650 students have attended metropolitan and country centres in classes variously described as literacy, reading or English.

1.100 The problems of handicapped persons in gaining access to TAFE are varied and complex. Failure to attempt a solution to these problems is to ignore a
significant, albeit relatively small, section of the community. There is an urgent need for facilities and services in technical colleges for the vocational training of those handicapped people who desire to obtain it without undue identification or segregation from their non handicapped peers. There are, of course, alternatives to classroom learning, and external studies organisations should examine their potential contribution, including the alleviation of illiteracy. These matters receive further attention in Chapter 4, especially under the heading ‘Towards Unrestricted Access’.

Minority Groups
1.101 The Committee’s attention was drawn to the problem of access to TAFE for various minority groups, including ethnic groups, Aborigines and immigrants with continuing language problems. The problems of ethnic groups are referred to in Chapters 3 and 4.

1.102 The Committee noted that the Commission of Enquiry into Poverty is concerned that it should understand the problems of access to education facing the poor.

RECURRENT EDUCATION
1.103 A new concept in education which is found, for example, in reports prepared for Unesco and for Ontario in Canada, is the ‘learning society’. It envisages a society where lifelong continuing education is regarded as the norm, where both work and education are so organised as to permit people of all ages to transfer as their needs require between one and the other, where education is measured in terms of fully developed people rather than by formal evidence of the acquisition of knowledge, where the educational system emphasises learning rather than teaching and produces self motivated people equipped with the basic skills of learning, where enthusiasm for learning is kindled and not extinguished by an education that many feel to be irrelevant, and where the gap between the educated who become more educated and the uneducated who have not acquired the skills of learning is reduced. Different education systems would remain, but barriers between them would be abolished, as would the barriers between formal and non formal education. It envisages, not equal treatment for everyone within the existing systems where merit is a criterion and a password, but the provision for each individual of a suitable education at an appropriate pace and time. The recommendations of the report Learning To Be prepared for Unesco are set out in Appendix F.

1.104 Such is the vision for the future. There are on-going experiments in a range of countries that seek to test various proposals that could in time coalesce to bring this vision closer to reality. The achievement of the reality, however, is fraught with difficulties, not the least of which is economic. The cost to the community presents it with one more in the long series of economic choices which make up political as well as private life. The present high cost must be weighed against possible future gain to the individual and to society.

1.105 Recurrent education is, however, fast becoming more than a concept concerned largely with the educational and cultural aspirations of individuals. It is becoming a necessity to enable the individual to cope with the rate of change in modern society. Change, technological and social, is continually opening up new directions. The individual can see these as a threat, or he can explore them for possible personal enrichment and job satisfaction. There is a relationship between the individual’s level of education and comprehension, and his effectiveness in assessing the implications of change.

1.106 It is an unreal view of modern life that people can store up sufficient education during the compulsory years of schooling or within their initial vocational
education in the trades, technologies or the professions, to last them a lifetime of change. The facts are different. To take advantage of new opportunities for personal and job satisfaction, updated job knowledge or changes of occupation, people need, and can benefit from, different additions to their education at different times in their lives.

1.107 Many people replenish their educational and technical competence at both public and private educational and training institutions in their own time and at intervals that suit them. They are strongly motivated people who are prepared to exchange present effort for an economic or social return at some future time. Many others, however, and probably the majority, through economic or social inadequacies, failure to anticipate in youth the benefits of formal education in adulthood, or for other reasons, have a disproportionately small amount of educational capital all their lives. Hence their opportunities for vocational improvement are accordingly limited.

1.108 Ideally, through recurrent educational opportunities, people who so wish should be able to repair, as often as necessary, insufficiencies of their initial education. They should also be able to add to, or replenish, their education. Where or when the replenishment takes place should be a matter for the individual. All that the educational system should do is to try to ensure the opportunity.

1.109 Recurrent education is presently thought of as part time study — in students' own time or partly in the employers' time. To acquire some types of education some adults may be best served by returning to formal teaching institutions full time for a period. This would require much more flexibility in working life than now exists.

1.110 Taken together, recurrent education and flexibility of working life — relating education and work — require an extension of social policy objectives if they are to be applied effectively. These objectives would have to provide for income maintenance during periods of educational leave from work, and perhaps social security measures for income transfers between education, work, leisure and retirement.

1.111 The Committee sees the questions raised in the previous paragraph as extending beyond its terms of reference, but is of the view that they should not be neglected. Recurrent education and flexibility of working life are already being combined piecemeal in various forms in Australia, as described below. The principle of paid study leave will enter its second discussion phase at the ILO Conference later this year. The matter is urgent, and needs to be explored in depth by governments, educators, employers and trade unions so that policy alternatives can be formulated and the community appreciate the available options. The Committee considers that a specific examination should be made of these questions with the available options and their implications — educational, industrial, social and economic — being clearly spelled out.

1.112 Individual institutions administered or maintained by governments and providing TAFE presently arrange various courses that involve flexible working time. Thus, they permit all or some of the following:

(a) part time attendance at courses conducted mainly after normal close of industry and commerce at 5 p.m.
(b) correspondence courses
(c) day time classes for persons, mainly apprentices, released by their employers to attend one day a week.
(d) full time block training for workers, mainly apprentices released by their employers to attend courses under the block release system — that is, for one or more short periods during a year
(e) a 'sandwich' arrangement under which periods of full time study alternate with periods of full time work
(f) ‘sandwich’ arrangements providing complementary theoretical and practical training for trainees from industrial and commercial establishments
(g) full time courses for students from a wide range of age groups.

1.113 The Committee is of the view that flexibility of working life is essential to the furtherance of recurrent education and that the specific study referred to in 1.111 should be pursued expeditiously.

1.114 In the Committee's view, a greater number of individuals than now would seek to make themselves more effective economically or socially, if the problems of access to recurrent education could be alleviated, without embarrassment to personal dignity. Recurrent education and its extension have special relevance to technical and community type colleges.

1.115 Technical colleges and other institutions are accepted places of adult learning. The Committee is of the view that, pending the study advocated in 1.111, the colleges should explore and implement further opportunities for adults to return to the educational stream as they wish. Where needed, the colleges should provide basic initial education for adults. The proposed Commission should examine ways in which financially disadvantaged persons can be helped to remedy inadequate primary and secondary education. The Committee believes that external studies might appeal to more people and therefore, in Chapter 4, encourages the expansion of external studies departments which in turn should aim to encourage self learning practices in the community. The Committee believes that non government non profit seeking adult education bodies which offer courses designed to fill the gaps in primary and secondary education for adults should be assisted by the Australian Government, and that the proposed Commission should frame appropriate recommendations to operate from the 1976 triennium.

**PREPARATION OF TEACHERS**

1.116 Objectives and intentions in TAFE cannot be achieved without trained, efficient teaching staff. The Committee is conscious that most teachers in initial training today will still be teaching in the year 2000 when it expects that the proportion of adults pursuing vocationally oriented studies out of school and through self learning, in relation to those attending formal classes of instruction, should have increased considerably.

1.117 The Committee's expectation is likely to prove premature, however, unless the training of teachers is oriented towards adult self learning methods. Such methods include the use of modern technology as integral to educational techniques, as in written or visual programmed instruction.

1.118 The Committee believes that the development of the initial training in all parts of Australia for teachers in technical and further education would benefit from common guidelines and equivalent national accreditation standards.

1.119 The pace of technological and social change is such that teachers must have opportunities to re-skill themselves in practical employment from time to time as well as in educational technology. They should have opportunities at least equal to
those of other people in the community to update their knowledge, and should have
open access to tests of proficiency, and whatever additional recognition success in
such tests may make possible. The Committee is of the view that in-service education
and training by various methods of conferences, exhibitions, seminars, field work in
industry, periods of alternative employment, study leave, and other possibilities
should be applied appropriately in individual cases and that the States should receive
special financial assistance to achieve this.

1.120 The Committee was informed at its inception that it was not intended to have
responsibility for advising the Australian Government on finance for ‘teacher
education’. It has taken this to apply to such full time training as is provided in
teachers colleges or, as they are generally now known, colleges of advanced
education. The Committee considers, however, that in technical and further
education the re-skilling and updating of teachers and their techniques is an
inseparable part of staff development programs and hence an inevitable recurrent
expenditure. It is analogous to recurrent on the job training in an office, factory or
shop. The subject is dealt with at length in Chapter 4.
CONCLUSIONS

(1) For the purpose of the Terms of Reference for the proposed Australian Commission on Technical and Further Education, technical and further education should be regarded as describing all organised and sustained programs designed to communicate vocationally oriented knowledge and to develop the individual's understanding and skills. It should include all programs of education with a vocational purpose, other than those financially supported by other Commissions, whether the individual is using the program with employment as a primary aim or with the aim of gaining additional specialised knowledge or skills for personal enrichment or job improvement. It includes what is usually known as 'adult education'. It does not include activities which have no direct educational purpose, and which are not planned as a systematic sequence, for example, social and corporate activities such as meetings of clubs, associations, or work camps having no explicit educational aim.

(2) The main purpose of education is the betterment and development of individual people and their contribution to the good of the community. Technical and further education should be planned accordingly. Emphasis on the needs of the individual should lead to easier access to learning, to better physical conditions for learning, to suitable student and teacher amenities, to welfare facilities, and to the highest standards of health and safety in workshops and laboratories.

(3) The emphasis in technical college type institutions should be primarily on the needs of the individual for vocationally oriented education and the manpower needs of industry should be seen as the context for courses. Relevant legislation both Federal and State could, to the community's advantage, be suitably amended to confirm this.

(4) Under the combined influences of technological, demographic and social changes, technical and further education is affecting a continually increasing proportion of the adult population, and this trend will continue. Most people seeking technical and further education are commonly influenced by utilitarian motives. As a result, it is important that general education be seen as relevant to vocational purposes and that vocational education in turn becomes more general in its content and methods so that people can be better prepared to adapt themselves to changing conditions and to re-training, as necessary, at any time of their working lives.

(5) Real barriers to vocationally oriented education exist, more so in some States than in others. Strong emphasis should be placed on unrestricted access to recurrent education. The colleges should extend preparatory courses, transfer courses and other help to enable adults to attempt the level of vocational education they desire, including the making good of omissions or deficiencies related to primary and secondary schooling. There should be unrestricted access to assessments of knowledge and skills for the purpose of gaining formal qualifications, irrespective of where or how the individual prepared himself. Entry requirements should be progressively eased.

(6) Technical and further education has too often been thought of as something different from a tidy mainstream of education — primary, secondary and tertiary. The proper perspective for the fourth quarter of the twentieth century is for technical and further education to be seen as an alternative — neither inferior nor superior — to the other stream of education, but so organised as to enable interchange without personal disadvantage.
(7) It is unrealistic to divide life into two parts — formal education during youth, and employment during adulthood. Formal schooling alone to the age of 15 or 16 is unlikely to educate a person for a lifetime, especially as the pace of technological and social change appears to be increasing and affecting the nature and structure of occupations.

(8) Recurrent education should be accepted as an integrating principle, the effective application of which requires co-ordination of the different levels and categories within the educational system, including courses conducted by institutions supported through the Australian Universities Commission and the Australian Commission on Advanced Education.

(9) The concept of recurrent vocationally oriented education is especially relevant to technical and further education. It offers the best hope whereby the community can cope with shifting job specifications resulting from technological and social change, and especially with new employment opportunities which open up. Technical college type institutions constitute the widest networks available in Australia for the formal vocational education of adults, and hence are particularly well suited to extend recurrent education practices and procedures. They should be given every opportunity to do so.

(10) Opportunities for recurrent education should help individuals who wish to repair inadequacies in their initial formal education or add to their knowledge and skills in order to change the direction of their vocational interests.

(11) The full application of the concept of recurrent education requires flexibility in working life which permits variations in hours of daily or weekly work, and some arrangements concerning study leave. Technical college type institutions already provide a wide variety of arrangements of courses which entail variable working hours, such as day release courses, block release arrangements, and sandwich courses. Social and industrial provisions which permit people to withdraw from the labour force temporarily to re-enter formal institutions of learning involve questions relating to income maintenance for potential students, costs to the employer and the community and, more far reaching, essential questions concerning priorities of social objectives. A national inquiry into the implications of paid study leave as related to recurrent vocationally oriented education is urgently required with a view to informing the community of the options that could be available immediately and those that could require further deliberation.

(12) There should be more opportunities for individuals to learn at their own pace and at such times as may be convenient to them by making it easier for them to have access to self learning aids, resources such as libraries, correspondence lessons, and audio and visual presentations.

(13) The demand for education throughout life can be expected to grow not simply because of changes in technologies and social organisation but also because people will become increasingly aware of the practical advantages that it gives the individual in respect of employment and livelihood. The cost of formal vocational education, however, will inhibit its growth unless advantage can be taken of new learning technology that can supplement formal teaching strategies and/or substitute self learning techniques for formal classroom attendance. Technology in educational strategy warrants very considerable development, and efforts should be encouraged to spread its use.
Colleges of external studies and like institutions should be expanded and encouraged financially to make available their self learning techniques and material to all capable and motivated persons. Eligibility for external studies should not depend on place of residence although obviously people who live in remote areas, or long distances from schools or colleges, or who suffer from illnesses and physical handicaps impeding attendance at classes, should have first call on what is available.

Relevance is the key principle in courses. Content must be kept relevant, and little-used knowledge and skills should be removed. Reviews for this purpose might be justified every two or three years of apprenticeship, post apprenticeship, technician area courses and the like, which are continually under the influence of technological change. In all States, committees of persons appointed from industry to assess course contents are used to a greater or lesser extent and are very helpful. Maintaining the relevance of contents of courses, however, is a task for specialists who can identify the critical requirements of vocations, and jettison material that is irrelevant. The Australian Government should help all States to employ and develop more such specialists.

TAFE authorities are responsible for ensuring that course content is relevant to occupational excellence. For this reason, they should keep in continuous touch with occupational trends. The proposed Australian Commission on Technical and Further Education should provide in its organisation for liaison with labour authorities — at national and State levels — to try to facilitate a regular flow of manpower information to the appropriate education authorities and to the public through counselling services.

Individuals, local communities, education authorities, industries and public services would all be assisted by reliable information as to the equivalence of vocational courses conducted in the different States and Territories. The proposed Australian Commission on Technical and Further Education should arrange for the information to be prepared, revised and published in an appropriate form. If a State should wish to amend a course for the purpose of achieving equivalence, a request for financial assistance to do this should be considered sympathetically.

The pace and volume of research should be stepped up concurrently with action to facilitate:

- understanding the problems of access to vocational education, problems of literacy, and learning difficulties experienced by adults of various ages, in association where practicable with the Commonwealth Commission of Enquiry into Poverty and other relevant bodies, and developing the means of answering them;
- development of improved and increasingly more reliable and valid methods of assessment and reporting of students' educational achievements and the fostering of methods whereby progress in learning outside formal teaching institutions can be identified and credited to the individual by way of qualifications;
- development of educational technology and its increased integration into learning strategies;
- dissemination of self learning facilities in conjunction with or additional to correspondence or other external studies arrangements;
- on-going identification of those courses or awards where it is desirable to achieve equivalence among States and review of objectives, guidelines and standards to achieve a desirable degree of consistency;
(f) more frequent revision of curricula in the light of technological, social, and other change;
(g) re-design of courses to integrate social and communication skills, both oral and written, with technical skills and give students a broad awareness of the social implications of technological and other emerging developments in their fields.

(19) More use is likely to be made of public educational facilities and services if the community is aware of what is available. Awareness requires publicity which is meaningful to the wide range of persons beyond school age. This publicity requires specialist staff. The Committee is doubtful that it will be effective otherwise.

(20) To help people plan to make the best use of their potential within their capacity, counselling and guidance services should be provided at each technical college, where individuals, whether enrolled or not in any course, may obtain information about how their goals can be pursued and their own likelihood of achieving these. These services can offer new career opportunities for experienced technical instructors or teachers or lecturers; trained psychologists may be needed for some counselling cases. Similar services should be available at regular intervals to people in remote areas.

(21) The services of social workers should be available to college students for counselling on personal, family or social problems. College organisations should be such as to try to avoid losing students because of such problems.

(22) If self learning in the sphere of vocational education is to be effective, there must be a supporting staff of mobile tutors to assist people with their studies, and provide remedial tuition, if necessary, and mobility among students to contact institutions when the need arises.

(23) If the preceding Conclusions are to have an effective widespread impact on the concepts and development of TAFE it will be necessary to capture the enthusiasm of teachers and to provide them with opportunities to gain the background and skills required. Emphasis on providing an educational service to people of all ages, regard for individual needs, technology in education, self paced adult learning, use of library resource centres, unrestricted access, recurrent vocationally oriented education, counselling and guidance services, social worker help, tutorial assistance—all these must be made an integral part of technical teacher training. The kind of teacher education and training, both initial and in-service, that is provided will determine how technical and further education develops.

(24) Access to further education by many persons who reside outside large metropolitan areas would be facilitated by the development of community type colleges which would help adults overcome deficiencies in their primary and secondary schooling and offer courses up to diploma level, where necessary, in addition to the range and level of courses customarily available from technical colleges. Such a development should, of course, have proper regard to practical economics and to educational standards at other institutions to which students may later wish to transfer, or from which they may wish to gain recognition for completed subjects. It is to be hoped that this Conclusion will not tempt principals or other education administrators to change the nature and character of 'technical colleges' whose designation they may decide to alter to that of 'community college'. Course levels at colleges should be determined by educational criteria alone and not by whether they can attract funds from the Australian Government which at present might not otherwise be available. The great majority of students at technical colleges
are there to gain applied knowledge and practical skills, and the colleges should continue to cater essentially for this kind of education. No useful purpose would be served by attempts to compete with institutions offering more advanced studies.

(25) Problems of access by adults to further education cannot be completely resolved by government administered educational institutions. Some individuals — perhaps many — can more appropriately be assisted by voluntary providing bodies, and financial assistance from the Australian Government should be considered for such bodies whose sole objective is adult education and which are not operated for profit.

(26) Technical education authorities and technical colleges have in years past suffered from insufficient finance to provide adequately for the growing demand for class accommodation and for back-up resources essential for planning future development and keeping present educational facilities, including course content, up to date. Education’s appetite for money is, of course, insatiable. Nevertheless, the State TAFE systems should not be suffering so severely as they obviously are from inadequate resources for planning to meet capital and recurrent needs, continuously producing statistical information on which to base decisions, conducting research for curriculum development, arranging in-service education for teaching and other staff, and carrying out other essential staff functions that should be expected from ‘headquarters’.

(27) Financial stringency may also be a reason why the physical provisions of so many colleges recall outmoded attitudes in industry when production departments were planned to the exclusion of physical amenities for and the social welfare of people. Departmental administrators, exceptions notwithstanding, do not appear to have sufficient authority to reject building plans that are inappropriate to present day thinking about the quality of adult living and of conditions for learning. The proposed Australian Commission on Technical and Further Education should not recommend finance for building projects without satisfying itself that the architectural design is adequate to the social needs of the student community as well as to technical requirements of classrooms and workshops.

(28) Some technical colleges are under heavy strain to cope with the demand for vocational education from adults during hours customarily regarded as appropriate for part time attendance.

(29) Paradoxically, however, the total accommodation and the equipment available at a large number of colleges is under-utilised at times of the day; for example, some technical colleges do not use the mornings for scheduled instruction on the grounds that employers would not release students. The Committee noted that views such as these were based on belief rather than the test of experience.

(30) TAFE authorities should experiment with timetables that aim at more economic usage of capital than is currently achieved, including new patterns of attendance.
2: STATE TAFE ORGANISATION

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DISTINQUISHING FEATURES

2.1 Technical colleges attracted the largest number of people in 1973 pursuing post school studies in government administered or maintained educational institutions. In that year, universities, colleges of advanced education and teachers colleges would have recorded an estimated 230,000 enrolments compared with 430,000 in technical colleges. These figures refer only to the public's contact as students with these institutions and are not intended to relate to the length of the contact or to make any comparison.

2.2 Technical college education is essentially vocationally oriented. Its institutions exist for knowledge users, as distinct from the universities which exist traditionally also for knowledge originators whose functions include basic research. One sharp contrast between technical colleges on the one hand and universities on the other, is that all the qualifications conferred by the latter are transferable and nationally recognised awards. A degree is a degree and, as often as not, the conferring university gets no mention. Technical college awards have no such universal recognition.

2.3 The principal characteristics of the student population of technical colleges are that it is adult, and predominantly male, between the ages of 18 and 24 years, spilling over to 30 years of age. Students are usually in employment and hence, except for some 5 to 6 per cent throughout Australia, are part time attenders or external students; in no State do the full time students exceed 8 per cent.

2.4 The external studies programs in TAFE are the major part of such government provided post school external studies programs. The technical college system's 41,000 correspondence students could represent as much as three-quarters of external studies enrolments for all types of post school education from government administered or maintained educational institutions.

ORGANISATION IN STATES

2.5 In four of the six States, technical and further education in government administered or maintained institutions is primarily available through a Department of Education which also administers primary as well as secondary education. New South Wales and South Australia each has a separate department for technical and further education.

New South Wales

2.6 The Department of Technical Education, expected shortly to be renamed the Department of Technical and Further Education, was created and made directly responsible to the Minister for Education in 1949 when it was separated from the Department of Education.

2.7 At the same time that the separate Department was created the Technical Education Advisory Council, with the Director of Technical Education as Chairman and consisting of representatives of industry, commerce, professions, and trade union and educational authorities, was established to make recommendations to the Minister on the provision and conduct of technical education as required by the Act.

2.8 There are 61 technical colleges, 16 of which are located within the metropolitan area. Associated with these are some 129 teaching centres, 3 mobile units consisting of specially equipped railway carriages, and courses by correspondence for students unable to attend college, including handicapped persons or those in remote
locations. A student counselling unit is available to all students and prospective students of the Department.

2.9 Recently a number of associate diploma courses were introduced into technical colleges for which funds were provided through the Australian Commission on Advanced Education. The first six of these courses started in 1973, although some professional and sub professional courses entered from the Higher School Certificate have been provided for some years in the technical colleges.

2.10 Certificate courses make what the Department regards as its main contribution to meeting the manpower needs of middle level occupations; that is, the para professional field including technicians. There are more than 50 types of certificate courses, mostly of 3 or 4 years' duration and usually conducted on a part time basis of 6 to 10 hours per week, although opportunities for full time studies are increasing. The minimum entry qualification is the N.S.W. School Certificate, but about half of the students enrolling have already completed a full secondary schooling. Most students are also employed in the vocation being studied.

2.11 Trade courses complement work experience. The most common attendance pattern is day release under which the apprentice attends college for one day; that is, 8 hours per week for 3 years. The colleges are experimenting with other attendance patterns including block release and initial full time attendance of six to twelve months followed by part time attendance. There are 79 types of trade courses in the various branches of the engineering, building, printing, electrical and other trades, and post trade courses are available for students who have completed a trade course and wish to specialise further. The trade courses are designed primarily for apprentices, and other students are accepted only under special circumstances.

2.12 Students who do not have the educational qualifications required for entry to particular vocational courses may undertake a preparatory course, such as certificate entrance, diploma entrance or nurse's entrance course, usually on a part time basis. Full time courses leading to the Higher School Certificate or matriculation examinations are available for those aged 18 or more.

2.13 A variety of courses not included above meet community needs, as will be noted from Appendix A. Many of these courses are not more than a year in length, are provided on a variety of attendance patterns and are not restricted by educational or occupational entry requirements. They include a wide range of courses in, for example, foreign languages, art, homecraft and handyman courses. Courses within the School of Secretarial Studies account for 12 per cent of the Department's total student enrolment and for most of its full time vocational students. They are the largest group of courses preparing for non apprenticeable skilled occupations.

2.14 Enrolments at 1 August 1973 totalled about 159,200, including 10,600 full time students and 12,400 correspondence students.

South Australia

2.15 Technical and further education is the responsibility of the Department of Further Education which from 1971 was established as a separate government department to include the former Technical Education Division of the Education Department. South Australia differs from other States in that the Education Department did not in the past have major responsibility for professional level diploma courses. The South Australian Institute of Technology was responsible for most of them and in addition had some responsibility for para professional certificate
courses. These latter courses are now being transferred to the new Department of Further Education. There is a South Australian Technician Certification Board which was established to accredit and grant certificates, particularly to courses conducted by the South Australian Institute of Technology and to those transferred from the Institute to the Department while both remain in certificate level teaching. Liaison between the three main agencies involved in adult education — the Workers’ Educational Association, the Department of Adult Education of the University of Adelaide and the Department of Further Education — is secured through a Consultative Committee of Adult Education.

2.16 There are 12 technical colleges, and a college of external studies which, together with 8 of the colleges, is located in the metropolitan area. Courses are also spread throughout the State through 16 further education centres with associated branches and classes in nearby towns and suburbs; migrant classes are conducted at a separate centre.

2.17 The major courses offered in technical colleges are certificate courses for middle level occupations, various special certificate courses, post trade certificate and trade courses (including vocational trade courses for upgrading and retraining of tradesmen), and general education courses. Courses offered by the further education centres can be broadly divided into the following categories: general education; preparation for public examinations; vocational and technological subjects; and recreational activity. The centres work in with local clubs and associations such as physical education groups, music and dramatic societies.

2.18 The number of individual enrolments at 1 August 1973 was 64,600, including 600 full time students and nearly 5,000 correspondence students.

Victoria

2.19 Technical and further education is the responsibility of the Education Department through its Technical Schools Division, and is also part of the activity of the Council of Adult Education of Victoria, which is discussed in Chapter 3 and described in Appendix B. Victoria differs from other States in that a large proportion of secondary education is conducted in technical schools administered by the Technical Schools Division. Post secondary technical education is conducted in both technical schools and technical colleges, the latter having a major emphasis on post secondary studies. In addition nearly 40 per cent of post secondary education takes place alongside advanced education in technical college divisions of colleges of advanced education, managed by incorporated councils. Some non advanced education courses in agricultural colleges are funded by the State Government.

2.20 The State Council for Technical Education in 1973 was given executive powers which it is progressively implementing; the Director of Technical Education is its Executive Officer. The Council is required to make recommendations to the Minister regarding provision of courses, finance and facilities in technical schools and colleges.

2.21 TAFE is provided at 74 technical schools, at 20 technical colleges, at 10 colleges of advanced education, which also offer tertiary education, and at annexes to two high schools.

2.22 The range of courses offered in technical colleges includes technical and tertiary orientation courses at Form V and VI levels, preparatory vocational courses, basic vocational courses including apprenticeship courses, post apprenticeship and
trade technician courses, para professional vocational courses including certificate and higher technician courses and certain adult education courses.

2.23 Some 64,000 boys and girls are enrolled between Forms I and V. Contained in this group are some 18,000 students at Form IV and V level, many of whom, had they lived in other States, could well have been enrolled in technical college courses at post secondary level. There are 81,700 post secondary technical students, including over 6,000 full time and 7,200 correspondence students.

2.24 There is a Technical Teachers College which provides teacher training for nearly 1,000 students, many under an internee arrangement. The College has recently become responsible under its own Council to the State College of Victoria (for teacher education).

Queensland

2.25 Technical colleges are administered by the Department of Education through its Technical Education Branch. The previous Technical Education Advisory Council was disbanded in 1971 with the establishment of the Board of Advanced Education. Establishment of colleges of advanced education was commenced in 1965, and they took over the higher level courses from the technical colleges, including certificate courses which are still conducted by the institutes of technology. There is a separate Board of Adult Education responsible to the Minister for Education which is discussed in Chapter 3 and described in Appendix B and there are certain rural training schools financed from the Education Vote and in which certificate courses are conducted.

2.26 There are 15 technical colleges and a technical correspondence school together with 5 annexes to technical colleges and 5 to high schools. Five technical colleges are located in the metropolitan area and the others in large provincial centres.

2.27 Fifty types of trade courses are offered with advanced trade courses available for further specialisation. Art courses are conducted from purely recreational to diploma level. Certificate courses are also now available in engineering, management, mining and rural studies; in addition various commercial, service and miscellaneous courses are conducted.

2.28 Enrolments at 1 August 1973 were nearly 35,000, including 1,700 full time and 8,700 correspondence students.

Western Australia

2.29 Technical and further education is the responsibility of the Education Department through its Technical Education Division.

2.30 The institutions comprise technical colleges which are the largest units, technical schools, which are the middle sized units, technical education centres, which may operate in technical education buildings or in high school buildings, and adult Aboriginal education centres. There are 5 technical colleges, 8 technical schools, 8 technical education centres with full time officers in charge, and 116 technical education centres with part time officers in charge. There is a counselling service providing a wide range of personnel, advisory and counselling services to industry, students and staff. External studies are provided through a Technical Extension Service and cover a wide range of apprentice and certificate type courses in both cities and country areas. It also arranges intensive courses for country apprentices.
2.31 Courses available are for pre-apprenticeship, trade studies for apprentices and post apprentice studies. Diploma and certificate courses are conducted in agriculture, art, building and architecture, engineering, general studies, health and psychology, management, business and commercial studies, and mathematics and science.

2.32 Awards for para professional courses are known as ‘diplomas’ or ‘certificates’. The title of ‘diploma’ has been in use in Western Australia since about the turn of the century and is well known. The title of ‘certificate’ is used for courses of a less demanding nature than ‘diploma’ courses. Some of the diploma courses are organised so that a ‘certificate’ may be awarded for successful completion of earlier stages of that diploma. Other certificate courses stand by themselves. Diplomas in this State are roughly equivalent to certificates in other States, and certificates are about the same level as apprenticeship courses.

2.33 At 1 August 1973 there were more than 70,000 enrolments, including nearly 3,000 full time students and over 8,000 in external studies by correspondence.

Tasmania

2.34 Technical and further education in Tasmania is divided between two authorities. Technical education is the responsibility of the Education Department through its Technical Education Branch. A Board of Technical Education was established in 1932 to make recommendations to the Minister on the provision and conduct of technical education in the State. Tasmania was the last State to separate the major provision of advanced education from the Education Department. Adult education is administered by the Adult Education Board as discussed in Chapter 3 and described in Appendix B.

2.35 There are 5 technical colleges, serving Hobart, Launceston, Devonport, Burnie and Queenstown respectively. In addition vocational classes are offered using high school premises in 4 other centres.

2.36 Courses offered include certificate courses for technician level studies on a full and part time basis, apprentice training courses together with post trade specialisation, preparatory courses and a variety of other vocational courses as required.

2.37 Enrolments as at 1 August 1973 were 7,400 with 440 full time and 220 correspondence students.

Australian Capital Territory

2.38 The Canberra Technical College comes under the control of the Australian Government Department of Education.

2.39 By arrangement with the New South Wales Department of Technical Education, the Canberra Technical College offers a selection of the New South Wales vocational courses leading to the various N.S.W. qualifications. Some courses offered in Canberra have elements specifically designed to meet the local needs of the A.C.T. The courses include preparatory courses, trade apprenticeships, post apprenticeship and certificate courses, and leisure time education. It also offers diploma level studies in art. Enrolments in 1973 totalled about 8,700.

Northern Territory

2.40 The Darwin Adult Education Centre, staffed by full and part time instructors, provides university, diploma and certificate tutorials, and classes in languages, trade, commercial, agricultural, technical and craft subjects. Its enrolment as at 1 August
1973 was over 3,000 students. Certain adult classes are also conducted from the Alice Springs Adult Education Centre.

2.41 An important development is the Darwin Community College for which buildings costing more than $4 million are being constructed ready for occupancy in 1974. The College will be governed by a Council, funded by the Australian Government, and will conduct trade and technician courses, adult education at all levels, ad hoc and in-service training to meet special needs, and tutorials for tertiary courses provided externally by other institutions.

COMMUNITY INVOLVEMENT IN TAFE

2.42 As recorded earlier in the descriptions of TAFE authorities, three States provide for community involvement in State councils of technical education — New South Wales, Victoria and Tasmania. They also have regional or college councils or both. The State councils are advisory bodies and in addition recent legislation in Victoria vested its Council with executive functions.

2.43 The Victorian Technical Schools Division expects that its system of regional and technical school councils will enable each college to develop its own identity, policy and programs within the broad limits of the overall policy laid down by the Division and spelled out in regulations. Local councils are seen as the agent for encouraging the schools and colleges to account for their educational activities to their respective communities. Principals, teachers and students are not entitled to membership of their own school council and the councils are encouraged not to intrude into the lines of communication between the Department and the schools and colleges.

2.44 Each Victorian technical school council is required, among other things, to provide for maintenance and management of the school or college out of its annual revenue which consists of a grant from the Education Department, tuition fees, testing and technical fees, grants from municipal and other bodies and sundry funds from various activities. The funds are used for payment of salaries and wages of part time teaching staff, clerical staff, caretakers and other employees, class materials, lighting, power, and fuel, and generally for efficient maintenance of the school.

2.45 Only in Victoria do local school or college councils have responsibilities with commensurate financial authority and accountability. Such tangible decision making functions are not yet available to councils in New South Wales or Tasmania. Victoria intends to develop yet greater community involvement in technical schools and colleges, and this should be followed closely by the proposed Australian Commission on Technical and Further Education, especially the decision making experience in respect of the use of funds for equipment purchases. The Committee felt, however, that the Victorian development was more likely to influence its secondary technical schools whose students are minors and, to a lesser extent, adolescents. Time will show how the technical college activities peopled exclusively by adults are affected.

2.46 The New South Wales Department of Technical Education told the Committee that its comprehensive State-wide network of district and college councils and committees had no formal authority; their principal task was the local promotion of the technical college. The councils or committees were most active when there were prospects of establishing or extending the local college but otherwise they were unlikely to develop an active involvement in college affairs.
2.47 The Tasmanian State and local networks have roles similar to those described by New South Wales in the preceding paragraph.

2.48 In the Committee's view, community involvement in technical college affairs increases where, as in Victoria, State and college councils and committees have responsibilities that involve executive decision making. New South Wales suggests that in its State such responsibilities could relate to buildings and grounds, college amenities, non teaching staff and adult education programs. The Committee observes that the council authority and accountability will not be commensurate with decision making responsibilities unless the councils are given financial budgets within which to work and to which they could add from their own resources.

2.49 New South Wales has put forward an idea that councils could raise extra money locally through a broad college membership system based on payment of an annual membership fee which might confer certain rights on members.

2.50 The Committee is of the view that divisions and departments of technical or further education should examine the role of State councils for TAFE and local councils for the purpose of encouraging more direct community responsibility.

2.51 The Committee recalls the adult student clientele of technical college type institutions and the part time nature of attendance. The form of community involvement in technical education needs to take this into account. Ways and means of facilitating student representation on local councils would be worth examining.

2.52 In all States, use is made of industry committees to advise on the subject content of courses. The Central Industrial Secretariat representing the views of the Associated Chambers of Manufactures of Australia and the Australian Council of Employers' Federations emphasised to the Committee that, appropriately structured, such committees could provide the necessary co-ordination and co-operation between industry and technical college systems so that each is aware of the other's problems, but left the Committee in no doubt of its view that this was not happening effectively anywhere at present.

2.53 The Central Industrial Secretariat said that, while some such committees are quite successful, many appear to be of limited value. It claimed that members of unsuccessful committees are unfamiliar with the current needs of the industry they purport to represent, while others pursue sectional trade interests rather than the wide problems confronting industry in respect of education and training needs.

2.54 The Committee draws attention to the views of these principal employer organisations. It considers that TAFE authorities should have close formal liaison with employer organisations, as well as with trade unions, professional and vocational institutes or associations, so as to ensure that committee members are persons with the necessary first hand knowledge of industry's current needs and current skills, as the case may be.

DEPARTMENTAL STRUCTURE

2.55 All Submissions to the Committee on behalf of technical college teachers claimed that technical education is best served by a separate department or authority from that responsible for primary and secondary education, as in New South Wales and South Australia.
2.56 The most frequent supporting argument was that separation provided direct access to the Minister for Education on whom the financial needs of technical colleges could be pressed directly; this would inevitably result, the argument was, in a better deal for technical education than is presently received in the four States where its needs lose their emphasis in the context of the far larger requirements of primary, secondary and tertiary education.

2.57 The technical college teachers' representatives, although aware of the unavoidable limitation on resources for education in general nevertheless pressed that a disproportionately low share of the limited funds for education as a totality had in the past gone to technical education. Directors-General of Education in those States where they are responsible also for technical education pointed out that they are obligated to ensure funds to facilitate compulsory attendance at primary or secondary school but not so at technical colleges where, except for apprentices, attendance is voluntary.

2.58 The view stressed by the Tasmanian technical teachers' representatives was that the interests and promotional opportunities of technical college teachers were disadvantaged in an education department with a structure that was dominated by a concern for primary and secondary teachers who comprised the majority of teachers.

2.59 The views submitted from New South Wales argued that the creation of a separate Department of Technical Education had not itself alleviated some problems of technical education in that State. They held that the control over the Department's staffing requirements exercised by the Public Service Board inhibited the development of technical education. The view of the South Australian technical college teachers' representatives was that the creation of a separate department had given their work a positive identity in the eyes of the community.

2.60 The representatives of the Technical Teachers' Association of Victoria envisaged not simply the creation of a separate department but one whose function, in the longer term, would be limited to servicing autonomous technical colleges, which would be controlled by local committees of a State Steering Committee with members drawn mainly from the community, with representation also from the Department and from teachers. The State Steering Committee would have more than an advisory function; it would have a budgetary responsibility and be financially accountable for all colleges within the State; it would allocate funds to local or regional committees. The effect would be to substitute the State Steering Committee for the Department as the disburser of funds and presumably as the negotiating channel to the Government. The servicing role of the Department would cover stores, the supply of teachers, determination of their working conditions, including salaries, general personnel administration, and other administrative matters.

2.61 The Committee believes that State Governments should be aware of these quite strong feelings represented on behalf of technical college teachers.

**STATUS**

2.62 The Committee has carefully considered the question of the status of TAFE, including views put to it on behalf of technical college teachers. Their opinions and those of parents, and the history of TAFE, contribute to the community's overall view of the subject.
2.63 The community’s view of technical colleges is affected by what it thinks the colleges do. In most States apprentices have in the past formed a significant part of the student population and hence the colleges tend to be associated in the community’s mind with manual and apprentice type skills. The colleges’ increasing role in developing cognitive skills for para professional, including technician, jobs, and providing opportunities for adults to re-enter the education stream is not generally acknowledged except, perhaps, in South Australia and Western Australia.

2.64 It is not unlikely that teachers and parents are more status conscious about technical colleges than the students who attend these colleges. Some parents, perhaps many, regard the colleges as poor alternatives to tertiary level education for their offspring, and they are unaware that today the modern technical college has a well qualified and experienced staff, including a high proportion of graduates, and is able to provide a balanced program developing all the skills of an individual.

2.65 There is, however, probably a more fundamental cause-and-effect influence on this question of status — one that derives from history and tradition and which the proposed solutions are unlikely to eliminate, although they might alleviate it.

2.66 The influence lies in the historical contrast of general and so called ‘liberal’ studies with technical education. Training in manual skills, industrial processes and commerce was not education, nor was it for the educated man until relatively recently. Such is the lingering force of history that there is no way of eliminating this influence; it is at least psychologically improbable that the educator in ‘education for its own sake’ — which many in primary, secondary and tertiary education believe themselves to be — would admit technical education to the status of educational purity.

2.67 Although TAFE has lacked adequate funds, the Committee believes that administrators and teachers, with some exceptions, tend to underestimate the value the community places on technical colleges and on the education available within them. It can be misleading to determine the status of colleges solely by comparing the amount of money allotted to them against, on the one hand, primary and secondary schools, and on the other hand, colleges of advanced education whose courses many technical educators see as having been transferred from technical colleges. Status is a relative thing and in this case status is determined by a complex of past, present and anticipated community attitudes to, and aspirations for, TAFE.

**STUDENT ATTENDANCE OPTIONS**

2.68 In Conclusion (6) the Committee recorded its view that the proper perspective for technical and further education in the fourth quarter of the twentieth century is for it to be seen as an alternative, neither inferior nor superior, to the other stream of education.

2.69 In 2.3 above, the part time attendance pattern was noted as a distinguishing characteristic of technical college type institutions. Appendix A indicates that, of 430,000 enrolments in technical colleges, about 95 per cent are part time students.

2.70 Full time college attendance is not necessarily superior to part time patterns but, in the Committee’s view, to continue to treat the colleges as institutions of limited attendance options for students is the lingering influence of an outdated concept. The under-utilisation of buildings and equipment is an accompanying fact.
2.71 The Committee noted the view of employer bodies that the present system of secondary education over Australia as a whole pays too little attention to preparing for vocationally oriented education those young people who either do not wish, or do not have the capabilities for various reasons, to undertake university education.

2.72 The Committee is of the view that this situation will not change until the community, including employers and trade unions, accepts TAFE as a viable alternative educational stream.

2.73 It has been the tradition for universities to provide students in most faculties with options of full time or part time attendance and, in more recent years, for full time studies to be encouraged by the availability of living allowances. On the other hand it has not been the tradition to provide a full time option for technical college students, including potential adult students who may wish to withdraw temporarily from the labour force to learn new skills, and this despite the fact that education living allowances are available for full time students at technical colleges. It seems to the Committee an anachronism that, because of the scarcity of full time options in technical colleges, the person preparing for an engineering profession at a university is assisted more generously than a person who wishes to prepare for a career at trade or para professional level at a technical college.

2.74 The Committee believes that in the context of today's structure of industry and commerce it is time to question the equity of withholding the full time option from technical colleges. Although industry can and must continue to play a substantial role in the training of its employees, the prevailing view that job training is solely an employer's responsibility, a production investment, is no longer tenable. Small firms each employing less than 100 persons absorb about 40 per cent of the labour force in the manufacturing industries alone. Neither these firms nor the medium sized firms employing up to 1,000 employees each have the facilities or the capabilities to develop the overall skills of the labour force, except in a hit or miss fashion. Even less can they prepare all the young people who may wish to enter into trade careers.

2.75 The N.S.W. Department of Technical Education suggested that there is a discernible trend towards extending a full time attendance option over more courses. The Australian Council of Employers' Federations and the Associated Chambers of Manufactures of Australia argued strongly through their Central Industrial Secretariat that full time options should be available in technical colleges as in other tertiary institutions but without dismantling the part time option.

2.76 It is standard practice across Australia for technical colleges to be closed to students for a considerable period during December and January. The Committee considers that this contributes to the under-utilisation of colleges and equipment, and it closes off access to TAFE at a time some people might find convenient to return to formal education. TAFE authorities should re-examine the situation to explore whether an alternative staffing pattern is practicable to permit colleges to operate the whole year round.
CONCLUSIONS

(31) The distinguishing features of technical colleges are the adult student population, predominantly between the ages of 18 and 24 years, their part time attendance pattern, and the supplementary nature of studentship to job holding.

(32) The external studies programs of the technical college system are by far the major part of external studies for all types of post school education from government administered or maintained educational institutions.

(33) Technical college education is vocationally oriented and is generally intended for knowledge users as distinct from knowledge originators.

(34) Technical college qualifications do not have universal interpretations or recognition. They can achieve this only if the different State authorities collaborate to produce equivalence and acceptable interpretations.

(35) TAFE courses currently provide some primary and secondary schooling for adults on the one hand and some advanced education on the other. There is no reason why this seeming overlap should not continue in appropriate circumstances with Australian Government financial support. The relevant education Commission set up by the Australian Government should develop ways and means.

(36) TAFE authorities operate through varying departmental structures in the States and Territories.

(37) The Committee has noted that except for recent action in Victoria TAFE authorities do not have well developed mechanisms for direct community responsibility and involvement. The Committee believes that community involvement in development and administration is highly desirable. However, traditionally efforts in this direction have been weak and most involvement restricted to advisory bodies. Consequently, the Committee had very little practical experience to draw on in considering what view it should put on this matter. It is the Committee's intention to recommend to the proposed Australian Commission on Technical and Further Education that it consider funding research into ways and means by which the Australian Government can finance effective community responsibility and involvement in TAFE.

(38) Liaison between TAFE authorities and employer bodies, the trade union movement, professional institutes and like bodies should be such as to ensure continuing effectiveness of industry committees.

(39) Departmental structures should be subject to more intensive study by the proposed Australian Commission on Technical and Further Education, and the view relating to the advantages of TAFE under authorities separate from education departments should be subject to public discussion.

(40) The extension of the option of full time attendance at technical colleges should be expedited without prejudice to the present option of part time attendance. The pro rata application of means tested living allowances should be explored for part time students whose net incomes may be adversely affected by day time attendances at courses. The proposed Australian Commission on Technical and Further Education should test community attitudes towards these two concepts.
3: DEMAND AND SUPPLY

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TECHNICAL COLLEGE COURSES

3.1 The Committee's Survey of technical colleges was carried out with the assistance of the Australian Bureau of Statistics. For the purpose of its Survey the Committee classified the educational activities of technical colleges into six main academic streams which were defined as follows:

**Stream 1. (Professional)** Courses which lead to professional status (including teacher education) or which enable professionals to update their technology or to specialise. Included are courses considered to be equivalent in depth and complexity to approved advanced education courses.

**Stream 2. (Para Professional)** Courses provided for those preparing for entrance to or progression within middle level or technician occupations. Includes a wide range of 'certificate' courses and some 'special' and post trade courses which are similar in complexity and purpose.

**Stream 3. (Trades)** All apprenticeship courses, and post trade courses not clearly classifiable to Stream 2.

**Stream 4. (Other Skilled)** All other skilled trade and other vocational courses relevant to basic principles, skills or knowledge but which are not included in Stream 3. Includes short training courses in additional on the job skills.

**Stream 5 (Preparatory)** All courses which can be broadly described as preparatory (matriculation and diploma entrance courses), remedial (remedial mathematics, English for migrants, etc.), and courses with vocational orientation not classified elsewhere.

**Stream 6 (Adult Education)** All courses in home handicrafts, hobbies, self-expression and cultural appreciation, including language courses.

3.2 Stream 2, the Para Professional Stream including technicians, attracts the largest proportion of student enrolments, some 27 per cent — about 2 per cent more than Stream 3, which consists mainly of apprentices whose enrolment at technical colleges is compulsory. Courses in Streams 1 to 4 are directly related to occupational opportunities and attract 70 per cent of all enrolments in technical colleges. Less than 1 per cent are found in Stream 1, the Professional Stream; the relatively minor role of this stream of studies is the direct result of the establishment of colleges of advanced education in more recent years to provide such studies.

3.3 Some 48,000 enrolments, that is 11 per cent of total college enrolments, are in Stream 5, which is concerned essentially with bridging and remedial education to help people cope with vocational and other studies of their choice.

3.4 Within each academic stream the Survey called for breakdowns of enrolments into fields of study. Table 3.1 shows that the non technological fields such as art, music, business, general studies and the non technological components of the services field attract more than 50 per cent of enrolments, and scientific or technological fields such as applied science, building, engineering, rural and paramedical studies, the remainder.

3.5 Although non technological studies dominate student enrolment, the largest single group of enrolments is the 27 per cent in the engineering field; this was strongly influenced by compulsory apprenticeship enrolment. Building studies, which attract 10 per cent of enrolments, are next in importance to engineering in the technological group. Within the non technological fields, business studies is the most important group, accounting for 20 per cent of all enrolments.
Table 3.1: Total Enrolments\(^{(a)}\) in TAFE by Field of Study, 1973\(^{(b)}\) — Australia.

\(^{('000s)}\)

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<td>0.3</td>
<td>9.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Music</td>
<td>—</td>
<td>0.1</td>
<td>—</td>
<td>1.9</td>
<td>0.1</td>
<td>—</td>
<td>0.1</td>
<td>—</td>
<td>2.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Paramedical</td>
<td>1.6</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
<td>0.5</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Services/Misc.</td>
<td>27.2</td>
<td>11.2</td>
<td>4.9</td>
<td>11.0</td>
<td>4.9</td>
<td>0.8</td>
<td>1.1</td>
<td>1.6</td>
<td>62.7</td>
<td>14.6</td>
</tr>
<tr>
<td>General Studies</td>
<td>15.1</td>
<td>1.8</td>
<td>4.3</td>
<td>13.6</td>
<td>31.3</td>
<td>0.6</td>
<td>0.7</td>
<td>0.4</td>
<td>67.8</td>
<td>15.8</td>
</tr>
<tr>
<td>Total</td>
<td>159.2(^{(c)})</td>
<td>81.7</td>
<td>34.9</td>
<td>64.6</td>
<td>70.7</td>
<td>7.4</td>
<td>3.1</td>
<td>8.7</td>
<td>430.3</td>
<td>100.0</td>
</tr>
<tr>
<td>%</td>
<td>37.0</td>
<td>19.0</td>
<td>8.1</td>
<td>15.0</td>
<td>16.4</td>
<td>1.7</td>
<td>0.7</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Full time, part time and correspondence combined.
(b) Enrolments up to and including 1 August 1973. The quoted figures relate to persons enrolled and not to subjects taken.
(c) Includes 1,525 students currently funded through the Australian Commission on Advanced Education.

Note: 1. Any discrepancies between totals and sums of components are due to rounding.

3.6 The teaching effort, that is the number of equivalent full time teachers (see footnote (a) to Table A.11), is distributed differently across academic streams from the enrolments, as shown in Table 3.2. Streams 3 and 4, comprising the basic vocational courses, account for more than 50 per cent of the teaching load and three-quarters of this is accounted for by the trades. Thus, about 40 per cent of the teaching effort in technical colleges is concentrated on apprenticeship enrolments which constitute only one-quarter of all enrolments.

Table 3.2: Percentage Distributions of TAFE Teaching Effort and Enrolments by Academic Stream, 1973 — Australia.

<table>
<thead>
<tr>
<th>Academic Stream</th>
<th>Percentage of Teaching Effort</th>
<th>Percentage of Enrolments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professional</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Para Professional</td>
<td>31</td>
<td>27</td>
</tr>
<tr>
<td>3. Trades</td>
<td>39</td>
<td>25</td>
</tr>
<tr>
<td>4. Other Skilled</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>5. Preparatory</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>6. Adult Education</td>
<td>7</td>
<td>19</td>
</tr>
</tbody>
</table>

Note: 1. Addition of column percentages to other than 100 is due to rounding.

3.7 Streams 1 to 4, which are occupationally directed, absorb 84 per cent of the total teaching effort for the 70 per cent of enrolments they attract. Preparatory Stream 5 receives 10 per cent of the teaching effort for the 11 per cent of college
enrolments its courses attract. The Adult Education Stream 6 receives a relatively small share of the teaching effort, 7 per cent for the 19 per cent of all college enrolments this Stream attracts.

3.8 The colleges reported 2,284 courses in operation. Nearly 60 per cent of these have a duration of less than one year's equivalent, which for the Committee's purpose was defined as 36 weeks of 15 hours per week or a comparable total of hours. Of these shorter courses one-third are in Streams 5 and 6. Courses in Streams 1 to 4 are evenly distributed between those whose notional duration is more than a year and those whose duration is less than one year of full time studies.

**POPULATION TRENDS**

3.9 Australia's population is expected to continue to grow at about the same rate in the 1970s as in the 1960s. (A net migration of 80,000 per annum is assumed for all population calculations.) The population change between 1961 and 1971 and the projection for 1981 are shown in Table 3.3.

**Table 3.3: Population at Census Dates in 1961 and 1971, Projections for 1981 — Australia.**

<table>
<thead>
<tr>
<th>Census</th>
<th>Males</th>
<th>Females</th>
<th>Persons</th>
<th>Percentage Growth over Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961(a)</td>
<td>5,352,886</td>
<td>5,234,552</td>
<td>10,587,438</td>
<td>20.5</td>
</tr>
<tr>
<td>1971</td>
<td>6,412,711</td>
<td>6,342,927</td>
<td>12,755,638</td>
<td>20.4</td>
</tr>
<tr>
<td>1981(b)</td>
<td>7,721,800</td>
<td>7,633,600</td>
<td>15,355,400</td>
<td></td>
</tr>
</tbody>
</table>

(a) Adjusted to include Aborigines estimated at approximately 79,000 who were not reported in the 1961 Census Collection.
(b) Projection assumes 80,000 per annum net migration.
Source: Australian Bureau of Statistics.

3.10 The population is young, about 46 per cent being under 25 years of age in 1971. This is very slightly less than in Canada and the USA but somewhat higher than in France, and considerably higher than in the United Kingdom and West Germany.

3.11 Total population trends and changes within the age composition of the population are significant for planning purposes because they affect the sizes of groups of potential users of the TAFE systems. Changes within the 15-29 age group, which in 1973 is estimated to form 77 per cent of all TAFE enrolments, are highlighted in Figures 3.1 and 3.2. Figure 3.3 shows the estimated age distribution of enrolments within each academic stream.

3.12 The rate of growth in the number of persons aged 15-29 is expected to slow down both in absolute terms and relative to total population growth during the 1970s. Between 1961 and 1971 the numbers aged 15-29 increased by 980,000 but between 1971 and 1981 the increase is expected to be only 680,000, making about 3.8 million of these young people in 1981. This age group in the 1960s increased at double the
Figure 3.1: Population 15-29 Years, as a Percentage of Total Population, Censuses 1933-1971 and Projected 1981 — Australia.
(Projections based on 80,000 a year net migration)
Figure 3.2: Population at 30 June 1966-1973 (Actual) and 1974-1991 (Projected), 0-4 years; and 1971-1973 (Actual) and 1974-1991 (Projected), 5-29 years — Australia.
Figure 3.3: Estimated Percentage Age/Sex Distribution of TAFE Enrolments within Academic Streams, 1973 — Australia.

Stream 1 (Professional)

Age (years)
15-19
20-24
25-29
30+

Males
Females

Stream 2 (Para Professional)

15-19
20-24
25-29
30+

Stream 3 (Trades)

15-19
20-24
25-29
30+

Stream 4 (Other Skilled)

15-19
20-24
25-29
30+

Stream 5 (Preparatory)

15-19
20-24
25-29
30+

Stream 6 (Adult Education)

15-19
20-24
25-29
30+

All Streams

(Total males and females in each Stream add to 100 per cent)
rate of the total population. It is now expected to increase in the 1970s at a rate similar to that of the total population.

3.13 In the 1960s the rate of growth in the 15-29 age group was on average 3.8 per cent per annum. It can be expected to decline in the 1970s to an average of 2.0 per cent per annum. Each of the age groups 15-19, 20-24 and 25-29 making up the 15-29 group can also be expected to show a decreasing growth rate. The composite rate of growth of the 15-29 years age group during the 1960s was 37 per cent but is expected to fall to 16 per cent growth during the 1970s. Focusing on the 15 year olds, their rate of growth in the 1970s will be less than one quarter of the growth rate of the 1960s.

PROJECTIONS OF TAFE ENROLMENTS

3.14 From the Survey data and from pertinent enrolment figures from some States, the Committee had estimates calculated of participation rates in each academic stream for full time, part time and correspondence enrolments, categorised by age group and sex. These were then applied to projections by the Australian

Table 3.4: Estimated Percentage Participation in TAFE\(^{(a)}\), 1973, by Age, Sex and Academic Stream — Australia.

<table>
<thead>
<tr>
<th>Academic Stream</th>
<th>Sex</th>
<th>Under 16(^{(b)})</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>15-19(^{(c)})</th>
<th>20-24</th>
<th>25-29</th>
<th>30+(^{(d)})</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Males</td>
<td>—</td>
<td>0.03</td>
<td>0.05</td>
<td>0.09</td>
<td>0.03</td>
<td>0.10</td>
<td>0.07</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>—</td>
<td>0.06</td>
<td>0.14</td>
<td>0.22</td>
<td>0.08</td>
<td>0.12</td>
<td>0.02</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Persons</td>
<td>—</td>
<td>0.04</td>
<td>0.10</td>
<td>0.16</td>
<td>0.06</td>
<td>0.11</td>
<td>0.05</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Males</td>
<td>0.09</td>
<td>0.64</td>
<td>2.36</td>
<td>5.12</td>
<td>8.03</td>
<td>3.16</td>
<td>7.28</td>
<td>3.89</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>0.38</td>
<td>0.82</td>
<td>1.13</td>
<td>1.49</td>
<td>1.62</td>
<td>1.08</td>
<td>0.80</td>
<td>0.30</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Persons</td>
<td>0.23</td>
<td>0.73</td>
<td>1.77</td>
<td>3.33</td>
<td>4.88</td>
<td>2.14</td>
<td>4.11</td>
<td>2.14</td>
<td>0.49</td>
</tr>
<tr>
<td>3</td>
<td>Males</td>
<td>3.21</td>
<td>10.66</td>
<td>18.13</td>
<td>19.68</td>
<td>15.25</td>
<td>13.24</td>
<td>2.77</td>
<td>0.46</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>0.50</td>
<td>1.10</td>
<td>1.44</td>
<td>1.08</td>
<td>0.65</td>
<td>0.93</td>
<td>0.11</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Persons</td>
<td>1.88</td>
<td>5.96</td>
<td>10.04</td>
<td>10.53</td>
<td>8.08</td>
<td>7.23</td>
<td>1.47</td>
<td>0.24</td>
<td>0.09</td>
</tr>
<tr>
<td>4</td>
<td>Males</td>
<td>1.25</td>
<td>1.24</td>
<td>1.70</td>
<td>1.86</td>
<td>1.87</td>
<td>1.58</td>
<td>1.49</td>
<td>1.06</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>2.84</td>
<td>4.80</td>
<td>5.39</td>
<td>3.46</td>
<td>2.65</td>
<td>3.83</td>
<td>1.44</td>
<td>1.00</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td>Persons</td>
<td>2.03</td>
<td>2.97</td>
<td>3.49</td>
<td>2.65</td>
<td>2.25</td>
<td>2.68</td>
<td>1.47</td>
<td>1.03</td>
<td>0.43</td>
</tr>
<tr>
<td>5</td>
<td>Males</td>
<td>0.54</td>
<td>1.25</td>
<td>2.28</td>
<td>3.79</td>
<td>3.73</td>
<td>2.28</td>
<td>1.58</td>
<td>0.81</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>0.34</td>
<td>0.88</td>
<td>1.59</td>
<td>1.97</td>
<td>1.68</td>
<td>1.28</td>
<td>0.75</td>
<td>0.40</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>Persons</td>
<td>0.44</td>
<td>1.07</td>
<td>1.95</td>
<td>2.89</td>
<td>2.72</td>
<td>1.79</td>
<td>1.17</td>
<td>0.61</td>
<td>0.17</td>
</tr>
<tr>
<td>6</td>
<td>Males</td>
<td>0.12</td>
<td>0.30</td>
<td>0.46</td>
<td>0.57</td>
<td>0.66</td>
<td>0.42</td>
<td>0.95</td>
<td>1.30</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>0.21</td>
<td>0.52</td>
<td>0.79</td>
<td>0.94</td>
<td>1.07</td>
<td>0.70</td>
<td>1.36</td>
<td>2.16</td>
<td>1.27</td>
</tr>
<tr>
<td></td>
<td>Persons</td>
<td>0.17</td>
<td>0.41</td>
<td>0.62</td>
<td>0.75</td>
<td>0.86</td>
<td>0.55</td>
<td>1.15</td>
<td>1.72</td>
<td>0.98</td>
</tr>
</tbody>
</table>

(a) See Note to Appendix A for details of source material.
(b) As a percentage of the population aged 15.
(c) Enrolments include persons under 15 years of age.
(d) As a percentage of the population aged 30-59.

Note: 1. Ages as at 1 August 1973.
Figure 3.4: TAFE Enrolments per 100 (a) Males and (b) Females in the Total Population Age Group, by single age 15-19 years.

Figure 3.5: TAFE Enrolments per 100 (a) Males and (b) Females in the Total Population Age Group, by selected age groups 15-59 years.
Bureau of Statistics for the total Australian population, assuming annual net migration of 80,000 and constancy of the 1973 TAFE participation rates. The methodology used, together with details of source material, is described in the Note attached to Appendix A.

3.15 From Table 3.4 and Figures 3.4 and 3.5 it will be seen that for all age groups males are potentially more likely to enrol in TAFE than females, viz. about 3:1 in the 20-24 age group; 2½:1 in the 15-19 age group; 2:1 in the 25-29 age group and slightly more than 1:1 in the age 30 and over group. Overall, the propensity to enrol declines with age. By far the highest propensity to enrol is found among males in the 15-19 age group in respect of the Trades Stream, where enrolment for apprenticeship courses is legally compulsory. For females the highest likelihood to enrol is within the same age group but in respect of the Other Skilled Stream. Participation by the over 30 age group is low for all academic streams.

3.16 Table 3.4 also provides participation rates by single ages in the 15-19 age group. The highest rates for males are for those in the Trades Stream particularly at age 18 where 20 out of each 100 males in the population are enrolled in apprenticeship courses. The next highest participation rates for males are to be found in the Para Professional Stream at ages 17, 18 and 19 years. The Other Skilled Stream has the highest participation rates for females for all single ages between 15 and 19 years followed by the Preparatory Stream at ages 17, 18 and 19.

3.17 For all streams combined, males have relatively high participation rates at ages 17, 18 and 19 years when for every 100 males in the population there are 25, 31 and 30 TAFE enrolments of these respective ages. Female participation reaches a peak at age 17 when 10 out of every 100 females are enrolled in TAFE.

3.18 The Committee suspects that an influence on TAFE participation at these early ages, as illustrated by the example given in 3.55, has been exerted by the increased retention rates in secondary schools over recent years. However, no statistical evidence is available on the relationship between the retention rate in secondary schools and TAFE participation rates. It is true, nevertheless, that if the present TAFE enrolment patterns persist, downward changes in the growth of the 17-19 age group will have great significance for TAFE operation and future planning. On the other hand, the increased participation at higher ages which might result from longer secondary schooling could increase the importance for TAFE planning of population trends at these ages.

3.19 Table 3.5 sets out projections of TAFE enrolments by sex and academic stream up to 1991 arrived at by applying the participation rates from Table 3.4 to the Australian Bureau of Statistics projections for the population as a whole. Table 3.6 measures the annual percentage change in enrolments over the same period.

3.20 According to the calculations prepared for the Committee, technical college enrolments can be expected to rise in the 18 year period to 1991 by about one-third, or 149,000, assuming constancy of 1973 participation rates*. What is more import-

*To test the sensitivity of the enrolment projections to variations in this assumption, calculations were made which assumed that TAFE participation would increase in the course of a decade to levels 5 per cent, 10, per cent and 15 per cent higher than the level of participation at the start of the decade, in all streams except the Trades Stream, where participation is already relatively high. Under these latter assumptions, total enrolments in 1991 could be expected to exceed 1973 enrolments by approximately 189,000 (an increase of 44 per cent over the period), 231,000 (a 54 per cent rise) and 274,000 (a 64 per cent rise) respectively. For a detailed account of these calculations see the Note attached to Appendix A.
Table 3.5: Estimated TAFE Enrolments, 1973 (Actual)\(^{(a)}\) and 1974-1991 (Projected), by Sex and Academic Stream — Australia.

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>All Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Persons</td>
<td>Males</td>
<td>Females</td>
<td>Persons</td>
<td>Males</td>
</tr>
<tr>
<td>1973</td>
<td>1502</td>
<td>1391</td>
<td>2893</td>
<td>1502</td>
<td>1391</td>
<td>2893</td>
<td>1502</td>
</tr>
<tr>
<td>1974</td>
<td>1540</td>
<td>1410</td>
<td>2950</td>
<td>1540</td>
<td>1410</td>
<td>2950</td>
<td>1540</td>
</tr>
<tr>
<td>1975</td>
<td>1570</td>
<td>1440</td>
<td>3010</td>
<td>1570</td>
<td>1440</td>
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<td>1470</td>
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<td>1978</td>
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<td>3210</td>
<td>1670</td>
<td>1540</td>
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<td>1979</td>
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<td>1570</td>
<td>3280</td>
<td>1710</td>
<td>1570</td>
<td>3280</td>
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<tr>
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<td>1600</td>
<td>3350</td>
<td>1740</td>
<td>1600</td>
<td>3350</td>
<td>1740</td>
</tr>
<tr>
<td>1981</td>
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<td>1630</td>
<td>3410</td>
<td>1780</td>
<td>1630</td>
<td>3410</td>
<td>1780</td>
</tr>
<tr>
<td>1982</td>
<td>1800</td>
<td>1640</td>
<td>3450</td>
<td>1800</td>
<td>1640</td>
<td>3450</td>
<td>1800</td>
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<td>1983</td>
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<td>1650</td>
<td>3470</td>
<td>1830</td>
<td>1650</td>
<td>3470</td>
<td>1830</td>
</tr>
<tr>
<td>1984</td>
<td>1850</td>
<td>1650</td>
<td>3500</td>
<td>1850</td>
<td>1650</td>
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<td>1850</td>
</tr>
<tr>
<td>1985</td>
<td>1870</td>
<td>1660</td>
<td>3530</td>
<td>1870</td>
<td>1660</td>
<td>3530</td>
<td>1870</td>
</tr>
<tr>
<td>1986</td>
<td>1880</td>
<td>1670</td>
<td>3550</td>
<td>1880</td>
<td>1670</td>
<td>3550</td>
<td>1880</td>
</tr>
<tr>
<td>1987</td>
<td>1900</td>
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<td>1988</td>
<td>1920</td>
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<td>3620</td>
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<td>1720</td>
<td>3660</td>
<td>1940</td>
<td>1720</td>
<td>3660</td>
<td>1940</td>
</tr>
</tbody>
</table>

(a) Male/female split estimated.

Note: Projections are based on assumptions of:
(i) net annual migration intake of 80,000;
(ii) constancy of 1973 age/sex participation rates.

See also footnote on page 51.
Table 3.6: Projected Annual Percentage Increase in TAFE Enrolments 1973-74 to 1990-91 by Sex and Academic Stream — Australia.

<table>
<thead>
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<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td></td>
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<td></td>
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<tr>
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<td>1.6</td>
<td>1.2</td>
</tr>
<tr>
<td>1981</td>
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<td>1.0</td>
<td>1.3</td>
<td>1.4</td>
<td>0.7</td>
<td>1.3</td>
<td>0.6</td>
</tr>
<tr>
<td>1982</td>
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<td>0.7</td>
<td>0.1</td>
<td>1.0</td>
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<tr>
<td>1983</td>
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<td>0.2</td>
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<td>0.9</td>
<td>0.7</td>
<td>0.9</td>
<td>0.3</td>
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<td>1984</td>
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<td>0.9</td>
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<td>0.9</td>
<td>1.2</td>
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<tr>
<td>1985</td>
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<td>1.2</td>
<td>0.9</td>
<td>1.7</td>
<td>1.5</td>
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<tr>
<td>1986</td>
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<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>1.5</td>
<td>1.6</td>
<td>1.4</td>
</tr>
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<td>1987</td>
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<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.7</td>
</tr>
<tr>
<td>1988</td>
<td>1.1</td>
<td>1.3</td>
<td>1.2</td>
<td>1.2</td>
<td>1.3</td>
<td>1.3</td>
<td>1.7</td>
</tr>
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<td>1.7</td>
<td>2.5</td>
<td>1.8</td>
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<td>2.6</td>
<td>2.1</td>
<td>1.9</td>
<td>2.4</td>
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<tr>
<td>1991</td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

See footnotes to Table 3.5 and footnote on page 51.

M—Males
F—Females
P—Persons
ant for planning purposes is the annual rate of growth of enrolments and how this changes within the period. As noted in 3.11 to 3.13, the rate of growth in the 15-29 year age group of the population is slowing down, and the impact of these declining growth rates, assuming no action is taken to disturb the 1973 pattern, will be felt in particular academic streams at different times but, generally, the annual growth rate in enrolments is expected to be low between 1978-79 and 1986-87. This will be followed by a strong upsurge in growth rates towards the end of the 1980s.

3.21 The hatched areas in Table 3.6 indicate where the annual growth rate falls to 1 per cent or lower. In the Trades Stream there is actually a fall in absolute terms, as would be expected from projected trends in the 15-19 age group in the total population between 1980 and 1984.

THE LABOUR FORCE

Labour Force Trends
3.22 The main feature of the labour force during the 1970s, as compared with the 1960s, are expected to be:
(a) an overall slower annual rate of growth, around 2 per cent;
(b) for each 100 married women aged 15-19 years in the population 33 were in the labour force in 1971 and the corresponding number in 1981 is likely to be 39;
(c) a lower participation rate of persons in the 15-19 age group.

3.23 The slightly lower rates of labour force growth can be explained by two major factors: firstly, the reduced rate of growth in the proportion of the 15-19 year olds in the population noted in 3.13 above, combined with a progressive increase in the numbers in this age group remaining for longer periods in secondary and full time tertiary education and, secondly, an increased proportion of the 65 and over age group who have retired as a result of the wider application of pension and superannuation schemes.

3.24 These two factors would have exerted a much stronger influence if it were not for the fact that they were counterbalanced to some degree by the increase in the proportion of married women remaining in, entering, or re-entering the labour force. As will be seen in Table 3.7, the proportion of the labour force occupied by married women rose from 9.6 per cent in 1961 to 18.0 per cent in 1971.

3.25 Looking at the labour force overall in 1971, the male participation rate and the rate for not-married females have declined since 1947; in contrast the participation rate of married women is four times as great (see Table 3.8).

3.26 For both males and females there has been a progressive decrease in labour force participation rates of the 15-19 age group, but more markedly among males. The Committee further assumes that the increased proportion of young people known to be remaining in full time education cannot be increasing enrolments in technical colleges since in no State do full time enrolments constitute more than 8 per cent of total TAFE enrolments. Of the 15-19 age group it is those in employment which constitute the bulk of technical college users.

3.27 In the 15-19 and the 20-24 age groups, married women participation has increased significantly because of those who stay on at work after marriage. All of the increase in female participation has been in the ranks of married women.
### Table 3.7: Size and Distribution of the Labour Force: Censuses 1947-1971 — Australia.

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Married Females</th>
<th>Not-married Females</th>
<th>All Females</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers '000s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>2470.4</td>
<td>141.8</td>
<td>569.3</td>
<td>711.1</td>
<td>3181.5</td>
</tr>
<tr>
<td>%</td>
<td>77.6</td>
<td>4.5</td>
<td>17.9</td>
<td>22.4</td>
<td>100.0</td>
</tr>
<tr>
<td>1954</td>
<td>2846.5</td>
<td>258.2</td>
<td>579.7</td>
<td>837.9</td>
<td>3684.4</td>
</tr>
<tr>
<td>%</td>
<td>77.3</td>
<td>7.0</td>
<td>15.7</td>
<td>22.7</td>
<td>100.0</td>
</tr>
<tr>
<td>1961</td>
<td>3157.9</td>
<td>405.5</td>
<td>646.6</td>
<td>1052.1</td>
<td>4210.0</td>
</tr>
<tr>
<td>%</td>
<td>75.0</td>
<td>9.6</td>
<td>15.4</td>
<td>25.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1966</td>
<td>3421.8</td>
<td>686.3</td>
<td>748.3</td>
<td>1434.6</td>
<td>4856.4</td>
</tr>
<tr>
<td>%</td>
<td>70.5</td>
<td>14.1</td>
<td>15.4</td>
<td>29.5</td>
<td>100.0</td>
</tr>
<tr>
<td>1971</td>
<td>3639.6</td>
<td>960.0</td>
<td>730.8</td>
<td>1690.8</td>
<td>5330.5</td>
</tr>
<tr>
<td>%</td>
<td>68.3</td>
<td>18.0</td>
<td>13.7</td>
<td>31.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Australian Bureau of Statistics Census Bulletins.

3.28 In the 25-29 age group the participation rate for not-married women has remained relatively stable, but here again the participation rate for married women has increased significantly.

3.29 In the 1971 Census, 8.9 per cent of employed persons was classified in primary industry, 32.8 per cent in secondary industry including building and construction, and, excluding 4 per cent in inadequately defined industries, the balance of 54.3 per cent was classified in other activities — of which commerce and finance, public authorities and professions, and transport and communication, absorb most.

3.30 Since 1947, the industrial composition of the labour force has persistently shown a marked reduction in the proportion engaged in primary industry. The proportion employed in secondary industry has remained more or less stable except for a slight decline recently and, notwithstanding the influence of changes in Australian Bureau of Statistics definitions, there have been increases in the proportion employed in what is known as 'other activities'.
Table 3.8: Labour Force Participation Rates by Age and Sex: Censuses 1947-1971 — Australia.
(Percentages)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td></td>
<td>81.0</td>
<td>79.7</td>
<td>69.6</td>
<td>66.2</td>
<td>55.7</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td>65.9</td>
<td>68.3</td>
<td>64.5</td>
<td>62.2</td>
<td>52.1</td>
</tr>
<tr>
<td>Married Females</td>
<td>15-19</td>
<td>11.2</td>
<td>17.4</td>
<td>20.0</td>
<td>29.5</td>
<td>36.5</td>
</tr>
<tr>
<td>Not-married Females</td>
<td></td>
<td>69.1</td>
<td>72.0</td>
<td>67.7</td>
<td>65.0</td>
<td>53.5</td>
</tr>
<tr>
<td>Persons</td>
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<td>73.8</td>
<td>74.1</td>
<td>67.1</td>
<td>64.2</td>
<td>54.0</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td>93.7</td>
<td>96.6</td>
<td>94.9</td>
<td>93.8</td>
<td>89.1</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td>48.7</td>
<td>48.7</td>
<td>50.8</td>
<td>58.9</td>
<td>58.6</td>
</tr>
<tr>
<td>Married Females</td>
<td>20-24</td>
<td>11.5</td>
<td>20.1</td>
<td>24.6</td>
<td>37.0</td>
<td>44.1</td>
</tr>
<tr>
<td>Not-married Females</td>
<td></td>
<td>83.0</td>
<td>87.5</td>
<td>88.9</td>
<td>89.2</td>
<td>82.3</td>
</tr>
<tr>
<td>Persons</td>
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<td>71.4</td>
<td>73.6</td>
<td>73.7</td>
<td>76.8</td>
<td>74.1</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td>96.7</td>
<td>98.4</td>
<td>98.2</td>
<td>97.2</td>
<td>94.8(a)</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td>24.2</td>
<td>26.4</td>
<td>27.4</td>
<td>34.5</td>
<td>38.9(a)</td>
</tr>
<tr>
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<td>8.3</td>
<td>14.5</td>
<td>17.2</td>
<td>26.0</td>
<td>33.0(a)</td>
</tr>
<tr>
<td>Not-married Females</td>
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<td>77.6</td>
<td>80.4</td>
<td>80.6</td>
<td>81.1</td>
<td>76.0(a)</td>
</tr>
<tr>
<td>Persons</td>
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<td>60.3</td>
<td>64.1</td>
<td>64.2</td>
<td>66.8</td>
<td>67.6(a)</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td>90.5</td>
<td>92.1</td>
<td>86.5</td>
<td>83.9</td>
<td>82.2(b)</td>
</tr>
<tr>
<td>Females</td>
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<td>46.0</td>
<td>46.7</td>
<td>48.8</td>
<td>53.4</td>
<td>48.1(b)</td>
</tr>
<tr>
<td>Married Females</td>
<td>15-29</td>
<td>9.6</td>
<td>16.6</td>
<td>20.4</td>
<td>30.8</td>
<td>36.5(b)</td>
</tr>
<tr>
<td>Not-married Females</td>
<td></td>
<td>74.7</td>
<td>77.3</td>
<td>74.1</td>
<td>72.3</td>
<td>63.5(b)</td>
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<tr>
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<td></td>
<td>68.4</td>
<td>70.2</td>
<td>68.4</td>
<td>69.0</td>
<td>65.6(b)</td>
</tr>
<tr>
<td>Males</td>
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<td>87.3</td>
<td>88.0</td>
<td>85.7</td>
<td>82.9</td>
<td>80.3</td>
</tr>
<tr>
<td>Females</td>
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<td>24.9</td>
<td>26.3</td>
<td>28.9</td>
<td>35.2</td>
<td>37.1</td>
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<td>Married Females</td>
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<td>12.6</td>
<td>17.3</td>
<td>26.6</td>
<td>32.8</td>
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<td>49.7</td>
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<td>44.9</td>
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<td>56.0</td>
<td>57.4</td>
<td>57.4</td>
<td>59.5</td>
<td>58.7</td>
</tr>
</tbody>
</table>

(a) 1971 figures relate to the age group 25-34 years.
(b) 1971 figures include the age group 29-34 years and therefore cover the range 15-34 years.

Note: 1. Because of the changes in Census classifications over the years these rates are not strictly comparable, but they can be used to indicate general trends.

Source: Australian Bureau of Statistics Census Bulletins.

3.31 Available occupational data are too broad to reveal shifts that might be taking place in the kinds of occupations for which TAFE prepares people. The data do not distinguish between types of skills, and the occupations lack clarity in definition. TAFE planning would be helped by more detailed information. The proposed Australian Commission on Technical and Further Education should consult closely with the Australian Bureau of Statistics to attempt a finer classification of occupations and to arrange for collection of the data through, say, intercensal surveys.

3.32 The relatively minor role of women in the skill intensity of the labour force is revealed in a broad way from the 1971 Census data on formal qualifications, as will be seen in Table 3.9.
Table 3.9: Percentage of Labour Force with Formal Qualifications by Sex, Census 1971 — Australia.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Trade Level</th>
<th>Technician Level</th>
<th>Other Tertiary</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>20.3</td>
<td>4.0</td>
<td>3.8</td>
<td>3.3</td>
</tr>
<tr>
<td>Female</td>
<td>1.9</td>
<td>5.1</td>
<td>5.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Persons</td>
<td>14.5</td>
<td>4.3</td>
<td>4.2</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Source: Australian Bureau of Statistics.

Geographic Factors

3.33 As far as the geographical distribution of the population is concerned the trend since at least the Second World War has been toward a concentration in the capital cities. Comparison of the average annual percentage changes in population over the two periods 1947-54 and 1966-71 indicates an increase in metropolitan areas from 2.5 to 4.1, a decline in other urban areas from 3.0 to minus 1.1 and a fall in rural areas from 2.0 to minus 1.0.

3.34 This trend towards metropolitan areas, with its accompanying rural depopulation, is in part the influence of a widening divergence in employment opportunities between metropolitan and non-metropolitan areas within Australia. Since 1954 metropolitan areas, and a limited number of provincial centres with particularly buoyant industries, have enjoyed a low level of unemployment while the situation in the remainder of Australia has not been so favourable.

3.35 In terms of the demand for technical and further education it needs to be borne in mind that geographic mobility usually will increase after vocational training has been completed. With regard to interstate migration New South Wales, Victoria, South Australia and Tasmania have been and are expected to continue to be net losers of population. Although there is no skill breakdown of interstate migration, it seems likely that these States have been supplying some of the technical education requirements of the rest of Australia.

3.36 Similarly, the non-metropolitan areas are supplying some of the technical education requirements of metropolitan areas. In 1.92, the Committee referred to the importance of providing the widest possible choice of vocational education in non-metropolitan areas independently of the scope of local employment opportunity, notwithstanding the fact that apprenticeship opportunities cannot be pursued except where on-the-job experience is available. Provision of courses in areas without appropriate employment opportunities must increase the importance of full time attendance options.

3.37 When consideration is given to the siting of technical and further education facilities, including community colleges, account needs to be taken of the movement of population as well as of the existing distribution of population. It may also be that in order to meet its dual responsibilities for the education of those not yet in the labour force and for the further education of those already in the labour force, different kinds of technical and further education facilities will need to be developed in different areas.
3.38 The future of planned growth centres in such areas as Albury-Wodonga, Holsworthy-Campbelltown, Bathurst-Orange, Gosford-Wyong, Geelong, Monarto, Townsville, Moreton region, Salvado, and the Tamar region may be important to the consideration of the geographic location of additional technical and further education resources. As yet, however, decentralisation proposals are still in the planning stages and their importance in creating employment opportunities outside of metropolitan areas, or the effect they will have on the drift of population into metropolitan areas, cannot be anticipated.

OVERALL TRENDS

Factors Affecting Enrolments

3.39 Although the demand for education generally will grow for reasons discussed in Chapter 1, examination of population and labour force trends leads to the conclusion that the growth in demand for vocational education in technical colleges will slow down unless, as appears to have happened in the USA, Canada and the United Kingdom, young people change their educational preferences in favour of courses providing vocational skills and unless demand for further education is stimulated. The provision of more full time attendance options in technical colleges, easier access to courses, and special attention to the needs of particular sections of the population and to the TAFE requirements of broad occupational streams could also counteract this prediction.

Women

3.40 The remarkable upward change in the labour force participation rates of married women, and the lack of formal qualifications among them as indicated in 3.32, suggest one direction in which TAFE facilities must be adapted.

3.41 Social and traditional attitudes of the community including those held by women themselves have excluded them from the manual trades and this appears unlikely to change significantly in the foreseeable future. They have not, however, faced the same obstacles in the professional and para professional fields where the strongest and fastest increases in the share of the skilled labour force are occurring. The TAFE fields of study consistent with these occupations can be seen in Table 3.1.

3.42 The 1971 Census data show that in the Professional, Technical and Related Workers group, women have better representation than men the younger the age group involved. They exceed the men substantially in the 15-19 year age group, but this relationship is reversed from age 25-34 onwards.

3.43 One possible explanation for this is that prior to marriage and child bearing women are able to enter these occupational groups freely, but after marriage they return to occupations less demanding or less prestigious than those they filled when younger. Among several possible reasons, this may be because the skills they had previously became rusty or because the standard pattern of working hours is not suitable for them.

3.44 TAFE institutions should act more positively towards this section of the community by providing a range of refresher courses and arranging attendance times to suit married women. They should examine the possibilities that the absence of facilities for child care inhibits the further education or refresher education of married women and that there are certain psychological or emotional problems for people in older age groups which daunt them from participating in the same classroom as young people who have remained in the formal educational process continuously or almost so.
Para Professions and Apprenticeships

3.45 Attention has been drawn in earlier sections of this Report to the heavy enrolments of students in the para professional courses in technical colleges relative to the number of persons with formal qualifications in the labour force, to the inadequacy of the access of adults to trade courses in technical colleges, to the upgrading of adults to tradesman status without supporting education in theory, and to dominance of the trades in the teaching effort of technical colleges.

3.46 Attention was also drawn in 3.29 and 3.30 to the strong growth of employment opportunities in industrial activities other than primary and secondary; this is especially true for women.

Para Professionals

3.47 The Committee has adopted the description ‘para professional’ for all occupations otherwise described in the literature as technicians, sub-professionals, or middle level occupations. They are commonly understood to be occupations requiring more knowledge of general principles than do the trades and less than do the professional groups. In the past, it has not been unusual to read that technician occupations are mainly filled by tradesmen and similar categories who have extended their knowledge by various means other than a systematic educational program, or alternatively by persons who have pursued professional courses with limited success.

3.48 The Committee considers that preparation for para professional occupations, including technicians, in manufacturing, in transport and communication and in building and construction deserves special attention by TAFE authorities in two forms; namely, college based and works based sandwich schemes. These arrangements are alternative forms of the sandwich system. It considers the proposed Australian Commission on Technical and Further Education should encourage States to pursue this stream of educational provision more vigorously and develop nationally recognised qualifications.

3.49 Para professional occupations in other fields, especially education, libraries, community and health services, need reviewing and should be accorded courses without duplicating the range of education appropriate to colleges of advanced education. The proposed Australian Commission on Technical and Further Education should invite the Australian Commission on Advanced Education to collaborate with it in preparing appropriate guidelines that can facilitate rapid development.

3.50 The availability of vocational education in the para professional stream should be widely advertised so that the present career opportunities become much better known than at present, and show young people at least an alternative to the professional stream of education. Recommendations for recurrent expenditure assistance to the States provide for this.

Apprentices

3.51 The regulation of apprenticeship and the provisions of apprenticeship training, as the ACTU Submission recalled, are primarily State Government responsibilities. The Australian Government is also concerned with apprenticeship through its responsibilities vis-à-vis the labour force and its development, and the labour market and its functioning. This has been reflected, for example, in the promotion of apprenticeship, financial assistance to increase the level and improve the quality of apprenticeship training and active participation, in conjunction with the States, in the Australian Apprenticeship Advisory Committee, including the provision of the secretariat.
3.52 Over recent years the extension of both day release and block release arrangements which permit day attendance has been conducive to a more effective learning environment. The block release system is spreading in most States. The current block release arrangements seek primarily to ensure that country apprentices receive more adequate opportunities than they have had in the past for face to face instruction in technical colleges.

3.53 The acceptance of concentrated full time periods of training, both for theory instruction and for the acquisition of basic skills, is accelerating a trend towards shorter apprenticeships. A pre-employment course which is now available in several trades in some States and is being progressively extended suggests the trend may be continued.

3.54 Within the context of the preceding discussion the Committee draws attention to the implications of the reduced growth rate of the 15-19 year old age group in the population, their increasing retention rates at schools and their decreasing rate of participation in the labour force.

3.55 It is traditional to measure the trend of apprenticeship intakes against numbers in the 15 year old population on the assumption that all but a small proportion come from that age group. For example, it is quite usual to refer to apprentice intakes being the equivalent of 25-28 per cent of 15 year olds in the population. This assumption, however, is no longer valid. Calculations made from student enrolment data available from N.S.W. and Victoria suggest that the number in the Trades Stream at age 15 is dwarfed by the first year enrolments for the 16 and over age groups. The data showed that of first year apprentices in the colleges in 1972, some 20 per cent were in the under 16 years age group as at 1 January, compared with about 40 per cent who were 16 years of age and about 20 per cent who were 17 years of age; the rest were older still. The 16 and over age groups are those to whose attention apprenticeship opportunities must increasingly be drawn.

3.56 Efforts to interest larger numbers in the 16 and 17 year age groups in apprenticeships will, however, require a new approach from the apprenticeship commissions and the several labour departments. Because of the longer periods people in these age groups have spent at school they will be better educated and more aware of the alternative career opportunities available to them and with which the apprenticeship trades have to compete. As far as TAFE authorities are concerned, an appropriate share of the publicity should be devoted to the Trades Stream, as requested by the ACTU, and information should be included as to the credits available to young persons with higher education that could shorten the apprenticeship period. It is clear that the gap between the supply and demand for tradesmen will not be closed by the existing apprenticeship system alone. Essential though the present publicity and incentive arrangements are, other action will be necessary to train tradesmen.

3.57 The Australian Department of Labour told the Committee that currently the factor restricting the requirement for apprenticeship training is not the demand for tradesmen nor the readiness of people to enter the trades, but the reluctance of employers in recent years to offer apprenticeships.

3.58 The Committee considers that this position is likely to change because of the decreasing growth rates of the 15-19 year old population and their reduced participation in the labour force. The position is likely to be that there are not enough boys available for the apprenticeships offering; this appears to have started already in the metal trades industries.
3.59 Even in those trades where traditionally there has been a well developed apprenticeship system it is not uncommon for some workers to be paid as tradesmen without formal training qualifications. Two surveys carried out by the Australian Department of Labour in 1964 and 1969, respectively, covering some 237 firms in New South Wales, Victoria, Queensland and South Australia showed that the proportion of persons reported to be on trade work and paid, without formal qualifications, as tradesmen in the firms surveyed was 18.5 per cent in 1964 and 15.2 per cent in 1969. It should be noted, however, that the survey was not based on a completely random sample. There were, as would be expected, marked differences in respect of different trades as shown in the following table.

Table 3.10: Persons without Formal Qualifications working as Tradesmen, Surveys 1964 and 1969.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Survey Year</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1964</td>
<td>1969</td>
<td></td>
</tr>
<tr>
<td>Welders</td>
<td>40.2</td>
<td>32.3</td>
<td></td>
</tr>
<tr>
<td>Fitters and Turners</td>
<td>9.9</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>First Class Machinists</td>
<td>38.7</td>
<td>31.3</td>
<td></td>
</tr>
<tr>
<td>Motor Mechanics</td>
<td>15.1</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>Electrical Mechanics</td>
<td>0.9</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Electrical Fitters</td>
<td>11.4</td>
<td>7.0</td>
<td></td>
</tr>
<tr>
<td>Boilermakers</td>
<td>4.3</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Panel Beaters</td>
<td>11.5</td>
<td>14.4</td>
<td></td>
</tr>
</tbody>
</table>

Source: Australian Department of Labour.

3.60 The Committee recalls its observations in 1.70 concerning the inadequate access for adults to technical college courses in the Trades Stream. A not inconsiderable proportion of adults in some trades expect to be upgraded to tradesmen, and their needs must be considered. The entry of such people into the trades is a response to the demand of the situation for tradesmen and the realism in some trades that there is no alternative way of securing enough people to work in skilled trade occupations.

3.61 The Committee considers that there may be more appropriate streams in which such mature people could acquire knowledge of trade theory and of skills not customarily used in their own places of work. The Committee is concerned here that the TAFE system make provision for this obvious and accepted ‘upgrading’ practice in the industrial community; this is not a matter which need necessarily involve apprenticeship commissions since no questions of adult apprenticeships are involved.

3.62 There appears to be a growing expectation among employers that technical colleges should teach apprentices an increasing range of specific skills in addition to basic skills. A major supporting argument is that employers can no longer provide the all round training for skill, partly because of the trend towards specialisation in factories, and partly or mainly the development of prefabrication and subsequent assembly. This tendency is accentuated by the growth in numbers of sub-contractors and self employed persons specialising in one aspect or another of a process. Another argument is that the disruption to the work flow in some plants is rendering on the job training of apprentices too costly. The statistics covering small firms in the manufacturing industry in 2.74 are relevant.
The Committee recalls that as far as the crafts are concerned the tradition behind the apprenticeship system was that the young apprentice was bound at a wage lower than other young employees in return for which the employer contracted to teach him the craft. In this tradition the task of the technical college was seen to be to bring about a better understanding of basic principles and skills.

The technical colleges have been responding to their respective State Apprenticeship Authorities by providing ‘workshop’ training for what the employers are apparently unable to do in industry. If this is the fact, the Committee observes that the apprenticeship-in-industry concept appears to be changing or has in fact changed. The employer is increasingly transferring his side of the apprenticeship contract to the technical education authorities; some industries are more affected than others.

The Committee noted the views stated in the Report of Australian Tripartite Mission 1968-69: The Training of Skilled Workers in Europe:

‘After considering the advantages and disadvantages of the various systems it concludes that throughout Europe, apprenticeship in the traditional sense is no longer regarded as appropriate for training skilled workers. It also points out that in the full time vocational school system, lack of actual industrial experience can be a disadvantage.

‘The Mission considers that the mixed system provides the most satisfactory method of training as it includes an introductory period of full time training off the job to teach trainees the basic elements of their trade and proper work methods, which is followed by a period of training and experience in industry. In most countries both the apprenticeship and full time vocational school systems are being adapted to incorporate features of the mixed system’.

If the mixed system of apprentice training is gaining ascendency, a policy statement to this effect is needed and a timetable set out for its full achievement. The Committee does not regard it as satisfactory that technical colleges whose workshops and classrooms were constructed with one training concept in mind should be expected to adapt to a different system without a comprehensive examination of the adequacy of accommodation and equipment to cope. Educational institutions must be given sufficient advance notice of intentions to increase the ‘in school’ content of apprenticeship arrangements or other full time provisions. The Committee considers that it is just as appropriate to give financial assistance to apprentices in full time education at college in their initial apprenticeship years as it is to give such assistance to undergraduates in engineering, chemistry, or any other faculty.

Having regard to the foregoing and to the concern about the educative and training aspects of apprenticeship, the Committee is satisfied that there is a strong case for a detailed inquiry into current technical college practices and the future needs of the Trades Stream. In this, it acknowledges the statutory role of State Apprenticeship Commissions and other bodies in this field, the significant parts played by trade unions and employers, and the current initiatives of the Australian Department of Labour.

The Committee considers that the proposed Australian Commission on Technical and Further Education should arrange for a detailed inquiry into the technical education provided for apprentices within technical colleges, the implication for TAFE of longer schooling for the 15-19 years age group prior to entering the labour force, and how current and future needs in the trades affect the
adequacy of existing arrangements, and that it should seek the collaboration of all relevant labour authorities, TAFE teacher bodies, employer bodies and trade unions in facilitating the inquiry.

Adult Education

3.69 In Conclusion (25) the Committee indicated its view that more than one category of bodies providing adult education should receive financial support from the Australian Government.

3.70 Providing bodies for adult education in Australia make available courses, seminars, workshops and like offerings in the arts, humanities, social and physical sciences, as well as classes or sessions that refresh or update vocational knowledge, instruct the public generally in useful crafts or 'handyman' skills, or that provide general knowledge in the technologies. In the main these bodies do not prepare participants for examinations, or for the acquisition of generally recognised academic or vocational qualifications. The Committee noted that the Board of Adult Education in Queensland is precluded from providing vocational courses.

3.71 It is possible to distinguish five major categories of providing bodies:

(a) Government maintained and administered —
   (i) Department of Further Education, South Australia
   (ii) Technical Education Division, Education Department, Western Australia
   (iii) Department of Technical Education, New South Wales
   (iv) Evening Classes, Department of Education, New South Wales
   (v) Evening Classes, Department of Education, Queensland
   (vi) Evening Classes, Secondary Schools Division, Education Department, Victoria
   (vii) Agricultural Extension Services in all States.

(b) Government maintained —
   (i) Board of Adult Education, Queensland
   (ii) Council of Adult Education, Victoria
   (iii) Board of Adult Education, Tasmania.

(c) Universities —
   Extension, Adult Education, or Continuing Education Departments or Centres of universities throughout Australia.

(d) Government subsidised bodies —
   Workers' Educational Association of New South Wales and of South Australia, which in some respects link with university extension work.

(e) Voluntary bodies constituted solely for adult education functions other than university extension, e.g. Adult Education Association in Victoria, Independent Learning Exchanges.

3.72 The Committee concludes that its terms of reference should be clarified in respect of activities covered by bodies listed in (d) and (e), in particular as far as they relate to providing opportunities for making good omissions or deficiencies for adults related to primary and secondary schooling, and for hobbies and like education not already being assisted financially through an Australian Government Authority. Because it has not had time to complete its study in sufficient detail the Committee considers that the proposed Commission on Technical and Further Education should provide in its organisation for a continuing study, as requested by the Australian Council of Trade Unions, of the bodies in (d) and (e) and any others that are subsequently thought to justify inclusion. It is of the view that the
proposed Commission should provide in its organisation for consultation with other Commissions on education as to ways and means of supporting government maintained or administered providing bodies whose activities contribute to the extension of the concept of recurrent education.

3.73 The extent of the information revealed by the Committee's study to date is contained in Appendix B.

Trade Union Education

3.74 The Australian Department of Labour drew the Committee's attention to the Government's recent approval for the establishment of centres for trade union training at national and State levels. The Department said that whether technical college facilities would be sought for the purposes of this training was a matter to be considered by the Interim Committee of the National Council of Trade Union Training which would be set up by legislation.

3.75 The Committee has noted the Australian Government's financial support for a National Union Training Scheme and agrees with the following observation in the Report of the 'Meeting of Experts on Paid Educational Leave' convened by ILO in Geneva in January 1972, and attached as Appendix 1 to Report VI (i) 'Paid Education Leave', sixth item on the Agenda of the International Labour Conference, 58th Session, Geneva, 1973.

'On the specific question of trade union studies, which several experts placed under the heading of civic and social education, it was agreed that a distinction had to be made between training for trade unionists in activities connected with the internal operation of the union . . . and education for union officers, shop stewards, members of works committees and rank-and-file trade unionists in economic, social, legal and similar fields to enable them to carry out their duties on different committees and bodies at undertaking, national and international levels and to deal on equal terms with persons have benefited from higher education. This latter type of training was of value to society as a whole . . . '.

3.76 The Committee has considered the role that TAFE institutions might play in trade union education as distinct from functional training. With the exception of the WEA of South Australia no government administered or financially supported educational institution appears to have played a major role in recent years, and the Committee believes this to be a serious omission in social affairs. Therefore, the Committee considers that the proposed Commission should provide resources in its organisation for a study of the role of TAFE institutions in trade union education, preferably in collaboration with the Interim Committee of the National Council of Trade Union Training, and should respond sympathetically to requests from the proposed National Council for the provision of pertinent courses of instruction.

3.77 The Committee noted that the idea of worker participation in management appears to be arousing some interest, especially following the publication of the Report prepared by the South Australian Government's Committee on Worker Participation in Management. There is a noticeable absence from TAFE, however, of courses in financial and general management specifically designed and conducted for members of trade unions which prepare them for this type of role. The Committee has noted observations by the Australian Minister for Labour, the Hon. Clyde R. Cameron on this matter and considers that the proposed Commission should invite proposals from TAFE authorities and other appropriate providing bodies for funds to test the viability of such courses. The Committee, consistent with the suggestion in the ACTU Submission that it keep in mind 'the broader needs of trade union education which are likely to be met by co-operation and consultation between
unions and TAFE bodies' considers further that all such proposals should indicate the degree of endorsement obtained from the State Trades and Labour Council or its equivalent.

Management Education
3.78 The Australian Department of Labour told the Committee that 'there is a vast gap between training provided for supervisors and post graduate management education. Many first level and middle level managers will never be able to aspire to post graduate management education of a type the Government has announced it will support through the University of New South Wales. There is a great need for systematic development of technically orientated management education and training which can be realistically undertaken, without having first to acquire graduate status, by the vast number of persons occupying managerial positions'.

3.79 The Department believes that the need that it sees can be met by appropriate action on the part of colleges of advanced education and, more particularly, by technical and further education institutions, through the establishment of management training courses open to all persons in managerial positions regardless of graduate status. The Department said that these management training courses should not be oriented solely towards business enterprises; they should cater for management education directed towards the public sector and other organisations (e.g. educational, health and industrial organisations) as well as the business community. In the Department's view, the curriculum should be wide enough to embrace not only management methods but also areas of inquiry such as industrial relations, social change and community values.

3.80 The Committee agrees with the Department's view and noted that supervisory training has been a continuing contribution of technical colleges for three decades and that some management training is also available.

3.81 The Committee considers TAFE institutions could do more than they are doing in respect of management training. It repeats its earlier observation, however, that technical colleges should serve the interests of knowledge users and should concentrate their contribution to management training on day-to-day management procedures and techniques. Advanced courses in management tend to be constructed in terms conceptually relevant to large or very large firms. The Committee believes that TAFE authorities should seek to concentrate on training suitable for small firms, and each State should consult with the Productivity Promotion Council of Australia and the Smaller Business Bureau to this end.

3.82 The Committee considers that the most possible contribution that could be made to management training for small firms at the present time is to develop specialised teachers. It considers that the Australian Government should offer appropriate scholarships for people wishing to specialise in management training for small firms, along the lines of those available for graduates under the Overseas Fellowships in Management Scheme.

Manpower Policies
3.83 The Committee noted that TAFE institutions contribute to the effectiveness of the Employment Training Schemes available from the Australian Government through the Australian Department of Labour. The latter informed the Committee that active consideration is being given to the integration of existing training schemes it administers and to broadening their scope to provide training for a wide range of persons in the labour force. The availability of such arrangements together with a planned strong publicity program is expected to increase significantly the demand for
technical and further educational facilities. The Committee understands that a
Report or Discussion Paper is in preparation for the Australian Department of
Labour on training and re-training policies. The Paper was not available to the
Committee at the time of writing and therefore its impact on TAFE could not be
taken into account. This will be a matter which the proposed Commission will need
to pursue.

3.84 The Department said that the basic aim is to provide assistance to persons
who, having completed their initial full time education and having been in the labour
force for some years, are encountering difficulties in adjusting to labour market
conditions. Additionally, training would extend to people who are prepared to enter
specified courses that have been developed to provide training in skills that are in
very short supply on the labour market, and there would be the capacity to stimulate
the development of training facilities by contributing to the operating costs of
approved courses. This aim complements the Committee's Conclusions concerning
Recurrent Education.

3.85 The Committee draws attention to three categories of persons whom it would
expect to be covered by the Department's aim, namely school leavers, people with
chronic unemployment backgrounds, and persons who, while in employment, are
seeking new skills or skills for upward vocational mobility. At present the technical
colleges provide mainly for the last category.

3.86 As for school leavers, there is room to question whether those who opt to
enter the labour force, and succeed, are later at a disadvantage educationally
compared with those who stay on at school because they failed to obtain work of
their choice. It is timely, in the Committee's view, to re-examine the assumption that
transitions from school to work can be accomplished in a one step process by all
young people. It could well be that, if technical colleges could offer a half-way house,
those who could benefit from three to six months' instruction and training in general
work skills and remedial education would choose this option rather than return to
other schools. Again it may be possible to keep open the option of school leavers who
enter the labour force and wish to withdraw to re-enter the education stream at some
later time when they feel additional education will advance their personal vocational
wishes.

3.87 People with chronic unemployment backgrounds come from diverse sectors
of the population: young workers, migrants, the disabled, the economically
disadvantaged, the middle aged, and perhaps others. No one root cause of their
unemployment is likely to exist. The Committee observes that the integration of the
existing Employment Training Schemes can benefit these people only if there is:
provision for TAFE institutions to differentiate in the remedial work between the
differing needs of particular individuals, and if there are enough slots within the
scheme to provide for these needs.

3.88 The needs of migrants are many but one to which the Committee feels that
TAFE authorities should give attention is the development of a course on language,
covering machines, equipment and industrial technology generally.

Technological Change
3.89 The Committee noted that in 1966 the U.S. Commission on Technology,
Automation and Economic Progress in effect concluded that technological change
gives rise to many problems but widespread unemployment in a rapidly growing
economy is not one of them. The Committee noted the Australian experience re­
ported in Hansard, 19 April 1972, pp. 1851-52, that in a sample of 7,398 persons
known to have been displaced by technological changes in the three years to November 1971, only 1,545 were actually retrenched.

3.90 The Australian Department of Labour informed the Committee that for the twelve months to 30 June 1973 out of 2,946 applicants, 1,682 persons in Australia were approved for re-training under the various training schemes for persons declared redundant or facing redundancy because of technological change and other reasons. The exact number whose employment was adversely affected by technological change alone is not available, but would probably have been relatively small.

3.91 The Committee considers that one impact of technological change has been a demand for better educated workers. 'Years of education' has become a significant criterion in job selection, causing a subtle prejudice against those with less formal schooling, even where the level of education is not vocationally significant. Part of the present trend for young people to stay longer in secondary schooling could be influenced by this.

3.92 The Committee has previously emphasised the importance of relevance in education to vocation. In the context of the impact of technology on employment, it warns TAFE against the pitfalls of being persuaded to over-provide on the length and depth of courses under persuasion by some professional institutes seeking to improve a self image and status. No less dangerous is the tendency towards empire building within the colleges themselves.

3.93 The justification for the length of courses should be subject to intensive curriculum research. Moreover TAFE authorities should resist attempts to add to course content, increase course length, or lift entry requirements without incontrovertible evidence that the skill involved has changed sufficiently to justify them. To raise course requirements can discriminate against students technically capable of acquiring the skill, but intellectually not up to advanced education which is so often not necessary to the skill user. The Committee proposes, as an initial step, that the length of all courses over 500 hours in duration should be the subject of intensive curriculum research, and that shorter courses should be subject to similar intensive examination at a later stage.

Manpower Planning
3.94 In 1.33 the Committee noted that manpower forecasting was envisaged by the Australian Minister for Labour.

3.95 Reliable manpower planning in Australia will take time to establish, and much work will be necessary, as overseas experience has shown, to produce results within a 10 per cent margin of accuracy. Two major problems will have to be overcome if the hazards of planning in this area are to be reduced. The first is to determine the relationships observable in past economic experiences which are relevant guides to future events; in more technical language, because the choice of the input-output coefficients predetermine the result, the relevance of the choice is all important. The second problem, perhaps even more difficult, is that data essential to forecasting models have yet to be collected and made available. As a minimum, labour force information has to be built up in a highly specific form, disaggregated by age, sex, education and training, earnings, occupation, industry and mobility.

3.96 These same problems face TAFE authorities in their efforts to predict. To plan for the future has an intuitive appeal, and few would argue against it least they be judged short sighted or unimaginative. Yet the fact must be observed that for the
immediate future reliable comprehensive forecasts of shifts in skill are unlikely to be available to TAFE authorities. For this reason, it is extremely doubtful that it will be possible for TAFE authorities in the foreseeable future to plan in detail changes in the fields of studies to anticipate future training needs in industry. Rather, they should learn to live closely with labour market experts and develop their facility for virtually immediate educational reaction when imbalances begin to appear.

3.97 In the Committee's view, consistent with 1.31, TAFE authorities should not delay in establishing strong, well staffed units for curriculum research and development to ensure the immediate relevance of course content to occupations. The proposed Commission should take the initiative in drawing the attention of the Australian Bureau of Statistics to the occupational data needed for more effective planning of vocational education, and in examining ways and means of collection.
CONCLUSIONS

(41) Enrolments in technical colleges are mainly in the vocational streams. The minority are in courses preparatory to other studies or in adult education. The Preparatory and Adult Education Streams are the most likely to attract older age groups to re-enter formal education, and the rewarding of successful study by formal recognition should be examined.

(42) Enrolments in technological fields no longer predominate in technical colleges although the largest single group of enrolments is in the engineering field which is strongly influenced by compulsory apprenticeship enrolments. More than 50 per cent of all enrolments are in the non technological fields such as art, music, business, general studies, and various service studies such as food services, fashion and transport.

(43) Apprentices receive the most concentrated teaching attention and the Preparatory and Adult Education Streams the least. This does not mean that too much effort is given to apprentices. It is rather a question of whether the size of classes in the Preparatory and Adult Education Streams is sufficiently small to enable individuals to obtain personal attention when it is needed. TAFE authorities should be sensitive to the probability that the sense of success or failure engendered in adults who attend the Preparatory and Adult Education Streams will strongly influence the extent to which the community practises the concept of recurrent education.

(44) The organisation of technical college courses should be revised to include a full time option for students who in its absence enter the labour force prematurely and most of whom are not attracted to the tertiary courses available on a full time basis at other institutions. There is no logical reason why the community should not subsidise the vocational education of persons wishing to study for skilled or middle level occupations at a technical college to the same extent as applies to persons seeking a degree or diploma at a university or college of advanced education.

(45) More full time attendance options should be available to young persons who wish to re-enter the stream of vocational education to seek further education or a formal qualification for which their work experience has led them to feel a need. The availability of such options should not reduce the part time option concurrent with work experience.

(46) If the 1973 student pattern at technical colleges throughout Australia remains constant, the enrolment level would be expected to increase relatively slowly, by about 150,000 between now and the early 1990s; the actual increase will be affected by trends in the 15-29 year age groups in the population and the labour force, and to the increased retention rates in secondary schools. Because there are heavy concentrations of under 30s in the migrant intake, the level of net migration over the period will also have significant effects on the growth of enrolments. If TAFE participation were to increase each decade to a level 5 per cent higher than the level of participation at the start of the decade for all academic streams except the Trades Stream, enrolments would grow by 189,000 by the early 1990s; corresponding increases of 10 per cent and 15 per cent would lead to increases of 231,000 and 274,000 enrolments respectively.

(47) The 1973 pattern of participation at technical colleges, of course, is almost certain to change. A number of State TAFE authorities have already taken action to
make this inevitable, especially in the Para Professional, Preparatory, and Adult Education Streams.

(48) Three influences are likely to support stronger and more purposeful action by TAFE authorities to attract an increasing number of people to re-enter educational streams that can affect their livelihood. First, the youthfulness of the population, some 46 per cent being under 25 years of age. Second, a spreading concern that educational effort should be linked with the practical goals of securing satisfying occupations. Third, the still growing participation of married women in the labour force, and the potential they offer for increasing the proportion of the population with formal qualifications.

(49) Special attention should be devoted to migrant youths in the 15-19 age group to obviate language problems that may otherwise inhibit them from pursuing TAFE.

(50) Women are presently less likely to enrol in TAFE than men. There is wide scope for women of all ages to gain formal qualifications in both the technological and non-technological fields in technical colleges, and enhance their occupational standing. With the advantage of formal qualifications acquired during their youth, women could resume more prestigious careers later in life with less re-training.

(51) Special attention should be given to the facilities in technical colleges for married women to gain formal vocational qualifications. In particular, the convenience of attendance times, facilities for child care for short periods, the amenities, and the psychological and emotional complexities of mature women sharing the same formal class facilities with adolescents just out of secondary school should be examined in each State as a matter of urgency.

(52) The Para Professional, including technician, Stream of TAFE is linked to middle level occupations in industry and commerce in which career opportunities are increasing faster than in other fields. The considerable enrolments in this Stream in technical colleges, however, do not appear yet to have added proportionally to the numbers in the community with formal qualifications and the proposed Australian Commission on Technical and Further Education should seek a more adequate explanation for this than is available at present.

(53) More action is desirable to link streams of vocational education in technical colleges to career opportunities in secondary industry and the fast growing tertiary industries. Young people at schools should be given more information about the relationship between available courses and existing occupations, and TAFE authorities should re-examine career opportunities to assess the sufficiency and relevance to the labour market of the current range of courses. More mature adults should be reached with information about preparatory and other courses that can help them move into more skilful occupations. Migrant communities should be approached through improved college counselling services to explain how overseas para-professional qualifications can be converted to Australian equivalents through technical colleges; TAFE authorities should examine whether there is some way by which such qualifications can be endorsed directly or by supplementary studies. There is no reason why examinations and other forms of assessment in the Para Professional and other streams need be conducted in the English language exclusively.

(54) The proposed Australian Commission on Technical and Further Education should consult the Australian Bureau of Statistics to develop definitions and classifications of occupations to reveal shifts in occupations that affect vocational education.
Geographic mobility among adults usually occurs after their initial vocational training has been completed. Until an assessment can be made of the manner and extent of changes in local labour markets that result from the development of the proposed growth centres, all non metropolitan technical colleges should provide a sufficiently wide range of vocational education not only to match local employment opportunities but also to facilitate the geographic mobility which is inevitable. Persons being educated in non metropolitan areas should not be disadvantaged by lack of opportunity to gain formal qualifications that are not relevant to the local scene.

Planned growth centres should receive special consideration when the locations of future technical colleges, and especially community colleges, are being determined. Those responsible for planning and acquiring sites for TAFE and their counterparts in other tertiary educational areas should consult closely and collaborate without competing for development.

Special attention should be devoted to preparation for para professional, including technician, occupations. The range of such courses should be increased when gaps are found, and there should be a deliberate extension of both college based and works based sandwich options and block attendance. The proposed Australian Commission on Technical and Further Education should make an early opportunity, in collaboration with labour authorities, to consult the trade union movement, professional organisations, and employer bodies, to encourage an acceptable rationale in so far as the educational aspects of the system are concerned.

The Para Professional Stream in a range of fields needs detailed examination to avoid overlap with the colleges of advanced education, and the proposed Australian Commission on Technical and Further Education should initiate discussions with the Australian Commission on Advanced Education as to how this can best be achieved. It is obvious that middle level occupations in community services, health, recreation, education, libraries, and child care will increase their share of the labour force. TAFE authorities should be sensitive to this requirement and react accordingly. The proposed Australian Commission on Technical and Further Education should be prepared to support requests for suitable financial assistance from the States to this end.

First year apprentices in technical colleges are now predominantly in the 16-18 age range, replacing the former predominance of the 15 year olds.

Efforts to interest larger numbers in the 16-18 year age groups in apprenticeship require a fresh approach from that used in the past to attract 15 year olds. This longer educated group is more aware of alternative career opportunities, and can be expected to have an increased interest in the Para Professional Stream in which enrolment by men is now second to the Trades Stream. TAFE authorities can contribute to apprenticeship recruitment efforts by making more information available to schools as to the credits available to better educated youths that can shorten the total apprenticeship period. Pre-employment courses should be extended over more trades but they should not be the only educational means recognised and credited to the apprenticeship period.

In the immediate past, the high growth rate in the 15-19 year age groups exceeded the growth rate in apprenticeship opportunities. This position is likely to change as the growth rate in the 15-19 year olds decreases. Unless the rate increases at which people in this age group enter apprenticeships, it is likely that there will not
be enough seeking apprenticeships to fill all the opportunities available; this appears to have started already in the metal trades in New South Wales.

(62) In the light of population and labour force trends and the tendency for youths to gain more education, the gap between the supply of apprentices and the demand for tradesmen is unlikely to be closed by the number of 15-19 year olds entering apprenticeship unless changes to the system occur more rapidly to suit present social and industrial circumstances. One of the principal changes should be to implement Conclusion (44) whereby youths would be subsidised as students, if they are prepared to study at a technical college full time in the trades areas for a period; this period would be credited as part of the apprenticeship, should they subsequently enter the trades. This would require a conscious policy change. The fiction of the present apprentice-in-industry concept is that apprenticeship training is essentially on the job training, supplemented by attendance at school. The actuality, however, is the mixed system concept in which schooling and job experience are a partnership, that is, are complementary. The mixed system should make provision for an introductory period of education and training off the job for the learning of the basic elements of trades and proper work methods and be followed by periods of training and experience in industry. Changes may be necessary in industrial law to bring about the maximum flexibility in apprentice training arrangements.

(63) The eventual development of the mixed system described in the preceding Conclusion is inevitable. To ensure that the apprentice-in-school is adequately prepared for industrial experience, the proposed Australian Commission on Technical and Further Education should arrange a detailed inquiry into the technical education presently provided for apprentices in technical colleges, the implications for TAFE of longer schooling for the 15-19 years age group prior to entering the labour force, and how current and future needs in the trades affect the adequacy of existing arrangements; it should also seek the collaboration of all relevant labour authorities, TAFE teacher bodies, employer organisations, trade union bodies, and professional institutions for the purpose.

(64) There is a significant proportion of upgraded tradesmen in skilled occupations who are without the advantages of education in the theory of their trades. These mature and recognised tradesmen should have special opportunities to acquire such education, and TAFE authorities should make the appropriate provision although not necessarily restricted to the Trades Stream of studies.

(65) The proposed Australian Commission on Technical and Further Education should provide in its organisation for a continuing study of providing bodies for adult education which are not operated for profit and are either subsidised by governments or operating without subsidies, with a view to recommending financial assistance from the Australian Government to extend their activities.

(66) The proposed Australian Commission on Technical and Further Education should provide in its organisation for on-going consultations with other commissions on education as to ways and means of supporting government maintained or administered bodies whose activities contribute to the extension of the concept of recurrent education.
The proposed Australian Commission on Technical and Further Education should arrange to study the role of TAFE institutions in trade union education, preferably in collaboration with the Interim Committee of the National Council on Trade Union Training and should respond sympathetically to requests from the proposed National Council for pertinent courses of instruction.

The proposed Australian Commission on Technical and Further Education should invite proposals from TAFE authorities and other appropriate bodies for funds to conduct courses in financial and general management in industry specifically designed and appropriate for members of trade unions who may be called upon at some time to participate at management or board level of business-type enterprises. Before being submitted, such proposals should have been endorsed by the Trades and Labour Council or its equivalent in the respective States.

TAFE institutions should make more provision for management training which deals explicitly with day-to-day management procedures and techniques and avoids any attempts to engage in the sophisticated theoretic work dealt with in universities and other private and governmental advanced schools of management. They should seek to concentrate on training suitable for small firms and consult the appropriate bodies in developing courses. The proposed Australian Commission on Technical and Further Education should propose a scheme of overseas scholarships for persons wishing to specialise in management training for small firms along the lines of those available to graduates under the Overseas Fellowships in Management Scheme.

TAFE authorities should facilitate the implementation of the national training and re-training schemes in the Australian Government's manpower policies. Recommended grants towards capital and recurrent expenditure should take this into account, and future submissions from States should indicate any inadequacies in the provision and proposals for overcoming them.

Technological change has, among other effects, led to a demand for better educated personnel. 'Years of education' has become a significant criterion in job selection, causing a subtle prejudice against less educated people for employment in work where the level of education is not really important. The proposed Australian Commission on Technical and Further Education should examine how the concept of recurrent education can stem this prejudice.

TAFE authorities should resist attempts to add to course content, increase the length of courses, or raise entry requirements without incontrovertible evidence that the skill involved justifies the change. The authorities should avoid changes that unnecessarily raise the complexity of courses and thereby discriminate against technically capable students whose interests or abilities are not suited to more academic forms of education. The length of courses should be the subject of intensive curriculum research, and initially an examination should be made of the justification for the length of all courses extending beyond 500 hours. Justification for the length of courses of less than 500 hours should also be sought at a later stage. The status of formal qualifications earned by successfully reaching the standard of knowledge and skill required should not be determined merely by the length of course.
For the immediate future reliable comprehensive forecasts of shifts in occupational skills are unlikely to be available. The proposed Australian Commission on Technical and Further Education should therefore assist State TAFE authorities in every possible way to strengthen their curriculum research units to develop a facility to respond quickly to imbalances that appear in the labour market.
# 4: RECURRENT AND CAPITAL NEEDS

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INTRODUCTION

4.1 This Chapter contains all the Committee's proposals for monetary grants from the Australian Government to the States for the development of technical and further education. The proposals cover both Recurrent and Capital Expenditure. The terms and conditions which the Committee considers should apply are written into individual recommendations and principles which it commends to the Australian Government and the proposed Australian Commission on Technical and Further Education for adoption.

4.2 The Committee's terms of reference cover the period 1 July 1974 to 31 December 1975 and accordingly it recommends that:

(1) All recommendations concerning grants from the Australian Government for purposes of recurrent or capital programs contained in this report refer to the period 1 July 1974 to 31 December 1975 both inclusive.

RECURRENT EXPENDITURE GRANTS

4.3 The Australian Government has not previously made grants to the States towards recurrent expenditure for technical and further education. The Committee considers financial assistance to the States absolutely necessary if TAFE is to develop in the directions indicated by its Conclusions.

4.4 The Australian Minister for Education informed the Committee that, in the event that grants towards recurrent expenditure were recommended, the Australian Government would expect the money to add to State expenditure but not substitute for it in whole or in part. In practical terms this would mean that States individually should continue to devote at least the same proportion annually of their respective Consolidated Revenue Fund expenditure to TAFE as was devoted in 1972-73. This proportion is shown in Column (3) in Table 4.1, Column (1) having been obtained from information provided in response to the Survey described in Appendix A.

Table 4.1: Actual Recurrent Expenditure on Technical Education as a Percentage of Total Consolidated Revenue Fund Expenditure, by State, 1972-73.

<table>
<thead>
<tr>
<th>State</th>
<th>Recurrent Expenditure on Technical Education (1) $</th>
<th>Total Consolidated Revenue Fund Expenditure (2) $</th>
<th>(1)/(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>37,929,000</td>
<td>1,336,100,683</td>
<td>2.84</td>
</tr>
<tr>
<td>Vic</td>
<td>26,500,600</td>
<td>1,381,153,250</td>
<td>1.92</td>
</tr>
<tr>
<td>Q'ld</td>
<td>7,065,000</td>
<td>702,902,480</td>
<td>1.01</td>
</tr>
<tr>
<td>SA</td>
<td>8,715,000</td>
<td>524,776,798</td>
<td>1.66</td>
</tr>
<tr>
<td>WA</td>
<td>9,752,000</td>
<td>477,329,528</td>
<td>2.04</td>
</tr>
<tr>
<td>Tas</td>
<td>2,460,770</td>
<td>185,998,130</td>
<td>1.32</td>
</tr>
</tbody>
</table>

(a) Source: State Budget Papers 1973-74.

4.5 The Committee proposes to recommend recurrent expenditure grants for general purposes and additional grants for specific purposes. In so recommending it
would anticipate that the proposed Australian Commission on Technical and Further Education would continue the recurrent expenditure support in the influenced spheres of action at no less a sum, adjusted as necessary for movements in the purchasing capability of the money and having regard to the qualifications in 4.6 below.

4.6 The Committee considers that any general purpose recurrent expenditure grant which the proposed Australian Commission on Technical and Further Education might recommend for any State for the financial year 1975-76 should be reduced proportionately by the extent to which that State's performance in 1973-74 falls short of the foregoing table, and similarly for each succeeding year within the 1976-78 triennium according to performance in the financial year preceding that for which adjustment is being made. On the other hand, the Committee further considers that any State which improves from State funds exclusively its percentage performance above the base figure in Column (3) of the foregoing table should be invited to claim, if it so wishes, a dollar for dollar grant for the extra from the Australian Government to be spent on recurrent expenditure for technical and further education solely at the State's discretion, but that it should inform the Australian Government for the record as to the nature of its intended expenditure.

GENERAL PURPOSE RECURRENT EXPENDITURE GRANTS

Allocation of Grants
4.7 The Survey referred to in 4.4 above, indicated that the six States expected cash expenditure in absolute terms to be increased by a total of approximately $19 million in 1973-74 over cash expenditure in the preceding year. Table 4.2 indicates a distribution of a further $19 million among the States consistent approximately with the spread among them of persons 15 years old and over in the Australian population.

Table 4.2: Hypothetical distribution of $19 million among the States.

<table>
<thead>
<tr>
<th>State</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>7.09</td>
</tr>
<tr>
<td>Vic</td>
<td>5.30</td>
</tr>
<tr>
<td>Q'ld</td>
<td>2.74</td>
</tr>
<tr>
<td>SA</td>
<td>1.77</td>
</tr>
<tr>
<td>WA</td>
<td>1.53</td>
</tr>
<tr>
<td>Tas</td>
<td>0.57</td>
</tr>
<tr>
<td>All States</td>
<td>19.00</td>
</tr>
</tbody>
</table>

4.8 The Committee proposes a general purpose recurrent grant to each State of which about 45 per cent is justified by special measures to implement concepts in its Conclusions relating to shifting the emphasis in TAFE to the needs of the individual; stimulating curriculum research; stimulating recurrent TAFE by increasing the community's awareness of what is available; enlarging counselling and guidance services; providing in-service training for non teaching staff; training professional librarians; speeding up the application of technology to education; external studies
and tutorial assistance; meeting frequently with other States to prepare lists of equivalent formal award qualifications; safety, health and welfare; planning capital works and related matters.

4.9 The Committee proposes a grant of $19.62 million for general purpose recurrent expenditure, but it doubts that the manpower resources of the nation would enable all States to expand their staff resources sufficiently within the eighteen months' period to absorb this full amount. In the light of this, the Committee proposes an initial outright grant of half, that is $9.81 million, for immediate distribution among the States, and drawing rights on the other half. It is not proposed to recommend that any unexpected portion of this general purpose expenditure grant be available beyond the eighteen months' period. By then, new proposals for recurrent expenditure grants should be available from the proposed Australian Commission on Technical and Further Education.

4.10 The Committee suggests that the proposed Commission give priority to the task of arranging for the individual States to make periodic returns of the distribution of recurrent expenditure grants so that regular reports can be published on developments in technical and further education in Australia and progress towards implementing the Conclusions and Recommendations of this Report.

4.11 The Committee recommends that:

(2) $9.81 million should be made available for distribution among the States as a general purpose recurrent expenditure grant and that a further $9.81 million should be available which individual States may seek approval to apply to recurrent expenditure purposes they specify, as follows:

Table 4.3: Recommended General Purpose Recurrent Expenditure Grant, 1 July 1974 to 31 December 1975 — Australia.

<table>
<thead>
<tr>
<th>State</th>
<th>Immediate Outright Grant (1) ($) million</th>
<th>Further Drawing Rights on Application (2) ($) million</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>3.45</td>
<td>3.45</td>
</tr>
<tr>
<td>Vic</td>
<td>2.68</td>
<td>2.68</td>
</tr>
<tr>
<td>Q'ld</td>
<td>1.62</td>
<td>1.62</td>
</tr>
<tr>
<td>SA</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td>WA</td>
<td>0.78</td>
<td>0.78</td>
</tr>
<tr>
<td>Tas</td>
<td>0.39</td>
<td>0.39</td>
</tr>
<tr>
<td>All States</td>
<td>9.81</td>
<td>9.81</td>
</tr>
</tbody>
</table>

55 per cent, approximately, of the sum of the amounts in columns (1) and (2) should be available to the respective States for expenditure at their discretion without prior reference to the proposed Commission. This expenditure, however, includes travel of staff to attend interstate meetings arranged by the proposed Australian Commission on Technical and Further Education, extra staff for existing libraries, additional ancillary staff for colleges, general research, consumable materials for workshops and laboratories, an advisory service to
industry on TAFE and such other matters as the separate TAFE authorities deem necessary.

The remainder of the grants under column (1) and column (2) are intended to be used for the purposes listed below. The proposed Commission should be prepared to discuss with each State variations in the proportions or sums within the total specified, provided programs are instituted to achieve the objectives laid down in this report.

10 per cent for curriculum research and development, specialist job analysts to ensure relevance of courses to occupations, staff and travel expenses for interstate meetings, determining national lists of interstate equivalence of award qualifications;

10 per cent for the training of professional staff for libraries, library resource materials and equipment as indicated in Recommendations (12) and (13);

7 per cent for the development of a central resource centre, external studies activities, research into and production of self learning aids, facilitating the mobility of tutors to students and vice versa;

5 per cent for publicity and measures to raise the level of community awareness of the availability of technical and further education in all its forms and by all its methods;

2 per cent for counselling services and social work;

1 per cent for staff to direct and oversee safety, health and welfare in individual colleges;

$120,000 by New South Wales, $66,000 by Victoria, $24,000 by Queensland, $24,000 by South Australia, $28,000 by Western Australia, $8,000 by Tasmania, for in-service training of non teaching staff;

Of the remainder $200,000 by New South Wales, $200,000 by Victoria, $100,000 by Queensland, $100,000 by South Australia, $100,000 by Western Australia and $70,000 by Tasmania should be used to appoint additional staff to form a unit to develop educational specifications for buildings, site plans and master plans for capital works development and redevelopment, and to contain special staff for statistical collections relating to the student and teacher population and related matters.

Curriculum Research and Development, and Qualifications Equivalents

4.12 All State authorities underlined the essential nature of curriculum research in the development of TAFE, and their concern that their efforts were being severely limited by funds.

4.13 In Conclusions (15) to (19) the Committee accepted this view which had found strong support also in a wide range of other Submissions. TAFE authorities are, of course, currently pressing ahead with research and development. For example, in South Australia, a Curriculum Development Branch is responsible for new courses and revisions. Again, in Victoria the Technical Schools Division has formed a curriculum development unit to advise its State Council on Technical Education. The New South Wales Technical Education Advisory Council asked the Committee to encourage the establishment of a New South Wales Technical Education Research Centre.

4.14 The Committee is of the view that the industry committees referred to in 2.52 to 2.54 should include technical college teachers, and students or recent ex-students, who can contribute to assessment of the relevance of course content and the effectiveness of teaching methods. College administrators should be sensitive to the needs and opinions of potential students so that TAFE institutions respond quickly to
educational needs just as 3.95 points to a similar need in respect of labour market specialists. This principle applies also to course design. Experienced persons from industry, trade unions and other employee organisations, and subject teachers should be involved by education authorities during the continuous development of vocational courses.

4.15 In Conclusion (17), the Committee declared its view that there would be benefit to Australia as a whole and to States individually for formal qualifications awarded from technical colleges to have reciprocal equivalence among all States.

4.16 The Committee received numerous representations to establish what was called a national accreditation system of qualifications in vocational education. It is of the view, however, that it is preferable for the States to be encouraged financially to collaborate to produce national lists of interstate equivalent qualifications and develop the means of maintaining the lists. The States’ effectiveness in assessing the equivalence of courses has to be an integral part of their respective organisations for curriculum research and development.

4.17 The Committee expects that the 10 per cent of the general purpose recurrent expenditure grant earmarked in 4.11 for curriculum research and development will include efforts towards achieving interstate equivalence of award qualifications and courses. This sum is also intended for action relevant to Conclusions (38), (52), (57), (58), (72) and (73) respectively.

Central Resource Centres and External Studies

4.18 Conclusions (12) to (14) indicate the Committee’s view that there should be more opportunities for individuals to learn at their own pace and at times convenient to them by using modern educational technology to make their access to education easier.

4.19 External studies are an alternative to formal class attendance and remove what is for some individuals a barrier to technical and further education. They are available from most TAFE authorities, for example, their vocational courses by correspondence.

4.20 There is little published information on which to make judgments concerning the effectiveness or otherwise of the existing techniques of external studies. It may be that the effectiveness of correspondence courses, for example, depends on the aspiring student’s language fluency and comprehension, or the level of literacy, which may affect his or her motivation and so on. The expansion of external studies opportunities should be accompanied by major inquiries into the characteristics of current practice, into explanations for success and failure rates, including withdrawal rates, the relationship between literacy and motivation and other relevant areas worthy of research referred to in Conclusion (18).

4.21 Specific purpose recurrent expenditure grants are proposed in 4.155 to research these problems.

4.22 Concurrent with the foregoing research, the Committee is of the view that external studies arrangements as on-going activities deserve special encouragement. It considers that they should, in each State, be the major activity initially of a Central Resource Centre (CRC), which should contain a comprehensive variety and quantity of learning media that facilitate development in the individual. It suggests that these CRCs accept as their guiding principles: first, that the individual should be assisted to learn at his own pace; second, that certain learning media may be more effective for
some subjects or topics than other media; third, that individuals react in different ways to different media.

4.23 The Committee considers that the facilities of the CRC should be available to students at technical colleges, learners in industry and commerce and to non government as well as government educational institutions.

4.24 The CRC should feed into college centres as discussed below under the heading of Library Resource Centres. The activities of the college centre should rest on the propositions: first, that college libraries constitute a natural core for their activities; second, that the quality of the learning process is strongly influenced by the range and quality of services available in or from resource centres; third, that to the extent that colleges are prepared to accept a substitute for the traditional formal teaching environment the CRCs will grow in importance for self directed learning. CRCs should provide for a range of learning aids, and for output of multi media materials including library books, periodicals, audio tapes, video tapes, films and transparencies. They should experiment with the hiring out of learning equipment to common interest groups and individual people who cannot, for whatever reason, conveniently attend the Centres.

4.25 The Committee believes that the hiring out of equipment could encourage TAFE among informal or ad hoc groups. It is of the view that some physically handicapped people, for example, and some ethnic groups, are more easily able to join strategically placed local discussion groups than formal classes at colleges. The proposed CRCs have a special role to play because they could make appropriate equipment available for vacationally oriented learning to disadvantaged persons, in the first instance, individually or in groups.

4.26 External studies arrangements should include a provision for tutors to move to students to provide counselling and remedial tuition, and a separate provision for students to move to instruction centres to satisfy individual needs or to take advantage from time to time of group instruction for self learning students.

4.27 The Committee sees no advantage in laying down lines to apply uniformly in all States but believes that the States should meet during 1974-75 to agree on some common principles that would enable them to put forward proposals for further financing of CRCs and extension of external studies during the triennium 1976-78.

4.28 The Committee intends that of the 7 per cent of the general purpose recurrent expenditure grant earmarked for operating CRCs and expanding external studies, approximately one-tenth should be used to purchase suitable equipment for lending free of charge to voluntary organisations or bodies organising vocational education for groups of disadvantaged persons coming together for vocational study purposes. Approximately two-tenths of the money should be devoted to the establishment of a tutor service for external studies programs, including learning groups in informal situations in metropolitan areas.

**Counselling Services**

4.29 People differ in their mental and physical attributes, interests, and capacities which, among other things, affect their choice of occupation. Individuals in the same occupation differ in job performance; some are proficient at one job and not at others, some proficient in a relatively wide variety of jobs, and some in hardly any.

4.30 Although studies indicate that in general the distribution of individual mental capacities is reflected in the types of occupations people pursue, there is much
overlapping; some labourers, for example, have greater mental capacities than some schoolmasters, but make a lesser contribution to the labour force than the potential of their capacities. Counselling should help people to discover under-used abilities they can develop to the extent they desire.

4.31 The individual is well advised to avoid technical education which is not consistent with his personal interests even though well within his capacity. Similarly, the individual is advised to avoid education which is beyond his capacity although within his serious interests. The pursuit of unreal aspirations usually leads to discontent, inefficiency and personal unhappiness for the individual and those around him. Students in studies which they find to be beyond their capacities should be helped to transfer to alternative channels rather than withdraw, and should be assisted to obtain credit for studies they have successfully completed. Similarly, students with abilities beyond their present studies should be assisted to discover these abilities and transfer to higher level studies more consistent with their newly discovered potential.

4.32 Greater mobility between occupations facilitates, among other things, more job satisfaction for the individual and a higher contribution to national productivity. Often this mobility requires a re-entry into education by the individual. Highly skilled counselling is frequently necessary to assist the individuals concerned, particularly people thirty years of age and over, many of whom are apprehensive about returning to formal education.

4.33 The Committee is of the view that there should be continuous efforts to keep the community aware that counsellors are available, free of charge, to assist adults at any age to reassess the adequacy of their education for their occupational needs and aspirations, and advise those — especially women — who wish to re-enter the labour force in an occupation for which they have not been trained.

4.34 Conclusion (20) indicated the type of counselling service that should be available in technical colleges. In addition to assisting students to arrive at informed decisions regarding the appropriate course of study to pursue, the counselling service should provide information regarding availability of courses, course content, and information relating education to vocations. Counsellors in TAFE must have special regard for the particular problems encountered by the part time student.

4.35 A minority of people will need the help of professional psychologists who can provide psychometric assessments to assist in the prediction of academic success and the identification of specific aptitudes for the area of education and subsequent occupation in which the student has indicated interest. More students will need help from qualified and experienced counsellors to cope with personal and social problems inhibiting their study progress.

4.36 The Committee considers that the counselling services already available in colleges for remedial and other educational purposes should be developed further. The appropriate TAFE authorities in the States should also encourage students to use the Career Reference Centres operated in capital cities by the Australian Department of Labour and other similar career and vocational guidance facilities.

4.37 The Committee expects that the 2 per cent of the general purpose recurrent expenditure grant earmarked for the extension of counselling and guidance services to students and potential students will ensure the provision of a sufficient number of professional psychologists and social workers, among other staff.
Publicity and Awareness

4.38 In Conclusion (19) the Committee expressed the view that more use was likely to be made of public educational facilities and services if the community is kept aware of what is available from TAFE authorities. It believes that TAFE authorities have a continuing responsibility to keep the community informed of the vocational education available to it. Specialised staff should be employed to lift the community’s level of awareness of TAFE through the use of a range of communication media. This should enable year-round programs to be developed and implemented. This is the intention behind the 5 per cent earmarked from the general purpose recurrent expenditure grant, as well as action appropriate to Conclusions (37), (53) and (60) respectively.

In-Service Training for Non Teaching Staff

4.39 The Committee considers in 4.83 that education authorities should give attention to the systematic on-going training of non teaching staff. It may well be that some of the expenditure for training non teaching staff will be incurred in purchasing training from other departments or from outside bodies. Training in supervision, management, and administration is a significant area for development. The earmarked sums in 4.11 are intended to encourage experimentation with the widest variety of training services practicable.

Planning for Capital Works

4.40 The Committee in 4.205 to 4.207 explains the importance of planning to the effectiveness of capital works programs. The minimum planning organisation should provide for compilation of appropriate statistics, preparation of educational specifications for capital works, recording commitments of expenditure of capital and recurrent funds, and assessing needs in equipment. The principal objective of the amounts earmarked in 4.11 is the forward planning of needed capital works projects and the implementation of Conclusion (26).

Safety, Health and Welfare

4.41 The Committee is anxious to have TAFE authorities provide more adequate attention to safety, health and welfare practices and procedures in classrooms, laboratories, workshops and common student areas. This is the essence of Conclusion (2).

4.42 The Committee considers that the 1 per cent of the general purpose recurrent expenditure grant earmarked should provide within each TAFE authority more safety officers and first aid staff whose principal responsibilities should be to direct and oversee provisions relating to safety, health and welfare in technical colleges at a standard not lower than that found in progressive industrial and commercial undertakings which look on legal requirements as the minimum starting point. Every college should for obvious reasons have a first aid centre that is known and staffed as such, regardless of what local ambulance service may be readily available.

Professional Staff, Library Resource Material and Library Equipment

4.43 The 10 per cent of the general purpose recurrent expenditure grant so earmarked is intended to be devoted to the purposes indicated in 4.123, 4.130 and 4.139.
SPECIFIC PURPOSE RECURRENT EXPENDITURE GRANTS

General
4.44 The Committee proposes that specific tied grants be available to States which are willing to use them only for the purposes intended by the Committee’s recommendations. Three of these specific purposes are: the generation of in-service education for teachers to ensure continual updating of their technical and social understanding, and their training in the provision of self-paced learning opportunities for individuals; the development of means to reduce barriers and impediments to access to TAFE; the development of community colleges as a special means of providing greater access to TAFE for persons in non-metropolitan areas. Two other proposals are for a research program and for the Australian Government to arrange for the establishment of an autonomous Australian TAFE Technology Centre whose main purposes are to innovate and to serve as a clearing house for technological innovation in education. Specific tied grants are also proposed for Library Resource Centres.

4.45 These specific purpose grants are additional to the provision that has been made in the general purpose recurrent expenditure proposals to make access to TAFE easier.

Towards Unrestricted Access
4.46 Basic to the concept of recurrent education are the propositions that a vocationally oriented system of education should be accessible to all, equitable in its treatment of disadvantaged groups, and accountable to the community because it is paid for from the public purse. The principle of universal access to TAFE is fundamental to Australia’s social and economic development. Conclusions (5), (40), (44), (45), (49), (51), (55), (62), (64) and (72) are all relevant to this proposed grant.

4.47 Universal access is a matter of equity. Older people, for instance, must be given an opportunity, if they wish to take it, to acquire a range of learning experiences that will help them to keep in step with young persons preparing for the labour force. Universal access means not simply entry to existing classroom learning but also possible alternative learning opportunities outside the formal education system.

4.48 Universal access must not be interpreted to mean watering down the system of TAFE; if it is, the result will not be worth having. Quality of TAFE at points of exit must be maintained without injuring opportunities for access at the entry points. Policies and procedures to ensure this involve human perceptions and attitudes. Potential applicants for courses need to be screened, not for the purposes of presenting a barrier to entry but to discover how the individual can be assisted to cope with his educational aspirations. College counselling services must have an intimate role in applying the principle of universal access.

4.49 The Committee regards resolution of the problems of access as fundamental to the right of the individual to prepare to earn a living within the social and industrial framework of society and in a manner suited to individual aspirations and personal satisfaction.

4.50 No person seeking an opportunity for post school learning should be deprived of it because of distance between his place of residence and an appropriate institution of learning. Alternative learning opportunities must be provided.
4.51 TAFE within the technical college systems in Australia is relatively free from obvious barriers to access, but real barriers that still exist were discussed at length in 1.58 to 1.115. TAFE authorities should take steps to re-examine these barriers and progressively remove them. The Committee believes that the proposed Australian Commission on Technical and Further Education should also provide in its organisation to record case studies of remedial action being implemented in the States and publish them as a contribution to the development of the concept of recurrent education.

4.52 In particular, the proposed Commission should periodically report progress in its official reports on the easing of entry requirements to courses, the increase of preparatory courses, the use of bridging courses, and other forms of help to adults to attempt the level of vocational education to which they aspire.

4.53 The Committee has previously drawn attention to the need to make special efforts to ensure that ethnic groups are not denied access to TAFE because of communication problems. It should be a particular function of college counselling services to contact these groups through appropriate local organisations and try to engender confidence that individual cases of hardship will not go unaided. The matter of overseas qualifications discussed in Conclusion (53) must be tackled constructively.

4.54 The Committee also discussed in 1.94 to 1.100 persons disadvantaged by varying degrees of physical and mental disability, and whose access to vocational education is restricted. TAFE systems have not catered as well for them as they could and should. Access is restricted not only by physical problems of design of buildings and equipment but also by curriculum structures, time limits on courses, and timetabling of classroom instruction.

4.55 Organisations interested in defined groups of disabled people have indicated the growing recognition that many disadvantaged people have no need for medical services beyond those of the non handicapped but that their prime needs are education, either in a special or integrated situation, and training to meet the demands of daily life and to enable them to develop their work potential. The vocational assessment should be on the individual's residual abilities rather than disabilities. Clearly, there should be access to education and training from an early age, but there is ample evidence to show that some disabilities do not become evident until adolescence. For many of the latter the real opportunities to prepare for a work life, however limited, will lie within TAFE and its capacity to meet their special requirements.

4.56 The Committee considers that TAFE authorities should develop the necessary facilities to cater for as many disadvantaged people as possible with appropriate learning opportunities. This would give effect to its view that vocational education and training for the disadvantaged should be available within a technical college to the extent practicable rather than in a separate institution for the disabled.

4.57 The Committee considers that recurrent expenditure funds should be provided for the establishment of a special unit within each State TAFE authority to plan and develop programs and procedures within technical colleges for disabled and otherwise disadvantaged people, facilitate appropriate organisational changes for them in courses, arrange the training of special tutors or teachers, and design or adjust equipment, as appropriate.
4.58 The Committee recommends that:

(3) A specific purpose recurrent expenditure grant of $1 million should be made available to the States to work towards furthering the concept of recurrent education and unrestricted access to vocationally oriented education, of which a minimum of 10 per cent should be earmarked for assistance to handicapped persons and a further minimum of 10 per cent to develop facilities to alleviate barriers to access discouraging ethnic groups, including means of converting overseas qualifications to local equivalents. The specific purpose includes the easing of entry requirements for courses, access to assessments or awards of qualifications without requirement for formal class attendances, extension of preparatory, bridging, transfer, and other courses for educational assistance, including meeting adult needs related to primary and secondary schooling. The distribution should be as follows:

Table 4.4: Recommended Specific Purpose Recurrent Expenditure Grant, Recurrent Education and Unrestricted Access, 1 July 1974 to 31 December 1975 — Australia.

<table>
<thead>
<tr>
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**Initial Teacher Preparation**

4.59 In primary and secondary schools in Australia it has become established practice that persons intending to become teachers be given a period of initial training before practising their chosen profession. This has been carried out on a full time basis in teachers colleges and in universities.

4.60 The Committee's survey of technical colleges revealed that 80 per cent of full time teachers had some form of pedagogic training.

4.61 The main characteristics of initial training for TAFE teachers are its part time basis, and its association with the teachers' first placement. The Committee noted that the ages of most persons from whom primary and secondary teachers are recruited are likely to be under 20 years of age at the commencement of their teaching training. Potential TAFE teachers must be much older; they are likely to be in the 25 years and over age group, have educational backgrounds ranging from completion of apprenticeships to higher degrees, and have varied industrial, commercial or professional experience of some years in length.

4.62 The Committee did not discern any common pattern of initial teacher education for technical colleges in the States, as the following paragraphs confirm.

4.63 In Victoria, the State College of Victoria at Hawthorn (formerly the Technical Teachers College) provides courses of one year's duration leading to a Trained Secondary Teacher's Certificate, a Trained Technical Teacher's Certificate, a Trained Technician Instructor's Certificate and of two years' duration leading to a Trained Trade Instructor's Certificate. Although much teacher
education in this College is of a secondary school teaching nature, significant re-
resources are devoted to training teachers for technical colleges. In the Victorian
approach, persons undergoing training are regarded as students of the Teachers
College; although they are required to engage in two or three days' teaching
experience each week, they see themselves as trainees rather than fully trained
teachers.

4.64 In New South Wales, the Sydney Teachers College has a Department of
Technical Teacher Education situated at the Sydney Technical College which
provides an initial course for all new teachers in the Department of Technical
Education. In contrast to the provisions in Victoria, persons are appointed as
teachers but released for training for 10 hours per week in their first year of
teaching and five hours per week in the second. This follows a fortnight's in-
duction of those recruited prior to the commencement of the teaching year. The
difference from the Victorian concept is in the perception of the appointee as a
teacher rather than a trainee.

4.65 In Western Australia the pattern bears a similarity to that in New South
Wales. Initial teacher preparation is provided by a Department of General
Studies and Technical Teacher Training at the Technical Extension Service. The
latter is a college of the Technical Education Division of the Western Australian
Education Department. The release of a person for training varies with his
previous qualifications. For those with professional level qualifications, such as a
degree or diploma, release is for 6½ hours per week in the first year and for 4½
hours per week in the second. Attendance at the teacher education course is
compulsory for all new recruits.

4.66 In South Australia the Department of Further Education's newly appointed
teachers, after a one week in-service course in teaching methods, are released for five
hours per week to study for the Diploma in Teaching (Technical). Most complete
Schedule 1 of this Diploma and some complete the full course. The course is provided
by the Torrens College of Advanced Education which was formerly the Western
Teachers College. A salary bar encourages teachers to complete Schedule 1.

4.67 In Queensland a program of technical teacher education is provided at the
Mount Gravatt Teachers College. Teacher education is mandatory for all new
appointees but some teachers do not commence the program in this first year of
appointment when recruitment exceeds the number of places available at the
Teachers College. Release for training is for one day per week (7 ¼ hours) for two
years.

4.68 In Tasmania, technical college teachers study for the Technical Instructor's
Certificate, but are not released from teaching for this purpose. The academic re-
quirements of the Certificate are similar for all teachers irrespective of previous
background. These requirements involve three subjects provided by the Education
Department's Centre for the Continuing Education of Teachers either by corre-
spondence or by attendance at classes. Each subject is accepted as the equivalent of 6
hours' study per week. These same subjects are provided for primary and secondary
school teachers in Tasmania who wish to upgrade their qualifications. The subjects
are not designed specifically for technical college needs. The Education Department
does not insist that a teacher enrol in this teacher education program but there are
salary and promotional barriers that cannot be passed until a teacher is qualified.
The Committee received Submissions, mainly from technical college teachers and their representative organisations, on the future development of initial teacher preparation for TAFE staff. Employing authorities have found difficulty in meeting the additional salary cost incurred during the period of training of new recruits because, unlike primary and secondary trainee teachers, technical teacher recruits are mature aged people who have been successful in their occupations and who require a full salary to be paid during their initial education period.

Technical college teacher organisations were emphatic that an initial teacher preparation program is necessary for all TAFE teachers. They urged that what is provided should meet a national standard that would be accepted throughout Australia.

Views in the Submissions differed. Some Submissions stressed the need for separate single discipline colleges emphasising teaching of adults. Others felt that this was possible in schools of education within colleges of advanced education and universities. Yet others drew attention to the problems arising when persons with trade certificate qualifications only are accepted by the latter institutions as meeting matriculation requirements.

In addition to such conflicting views and lack of clear cut initiatives in the nature of the initial teacher preparation program required, the Committee was also concerned about the significance of the changes it wishes to encourage in the development and philosophy of TAFE, and the implication for the preparation of technical college teachers discussed in 1.116 to 1.120.

Time has limited the Committee from following up in appropriate depth significant questions raised in Submissions. The issue is of great importance to the quality of TAFE, particularly since many of the teachers recruited in 1974 and 1975 are likely to be teaching in the next century.

The Committee therefore believes it to be a matter of urgency for a special inquiry to be commenced into the initial preparation of teachers for TAFE. It suggests the terms of reference for such an inquiry might be:

(a) To examine and propose in general the special requirements desirable in the initial preparation of persons for the role of full time teachers in TAFE.
(b) To recommend guidelines as to how these special requirements might be met.
(c) To recommend a basis for the national accreditation of initial technical college teacher education, if this is found to be a desirable objective.
(d) To consider the particular needs for initial preparation of part time teachers in TAFE, and to recommend how these might be met.
(e) To recommend levels of support for the development of initial preparation for both full time and part time technical college teachers, and how the support might be provided.

The Committee therefore recommends:

(4) That a special inquiry into initial teacher preparation for technical and further education be jointly arranged by the Australian Commission on Advanced Education and the proposed Australian Commission on Technical and Further Education, and that the inquiry present its conclusions towards the end of March 1975.
In-Service Education

4.76 If TAFE is to keep pace with technological and social change, technical teachers must be given increasing opportunities for professional and personal development during their teaching careers. Moreover, if the emphasis is to shift from instruction in a teacher centred classroom to individual learning of a self paced nature, the role of the teacher will need to change. To pursue this shift of emphasis in the learning process teachers will need to extend and deepen their knowledge of teaching methods and educational theory. In addition, they will require a practical understanding of the concepts and methods of educational technology. The changing role of the teacher will be more readily accepted if he is involved in the planning and introduction of the process and is equipped to handle it.

4.77 The Committee is of the view that teachers can benefit from recurrent refresher training and noted that there is a wide variety of programs among the various States. These programs, however, are not yet adequate anywhere and in-service training for both full time and part time teaching staff should receive a high priority. Technical college teachers should be involved in the development of programs.

4.78 The Committee considers that in order to obtain the most effective in-service opportunities both TAFE authorities and teachers will need to engage in a number of training methods and use a variety of institutions. The degree of staff development desired, however, will not be achieved unless the authorities are able to release teachers from other duties and there is also a willingness by teachers to devote some of their personal time to their own further education.

4.79 Staff development plans should enable teachers to refresh and extend their technical knowledge and abilities within their own areas of special interest and competence, or to acquire new competencies for their own and the community's advantage. In this respect, close links or periods of employment with industry and commerce, or intrastate and interstate participation in seminars and conferences, will be more rewarding for some teachers and more appropriate than formal study.

4.80 It is a reasonable expectation that some teachers will be appointed or will aspire to be appointed to positions carrying special administrative responsibilities. Administrative training is important also for senior teachers, heads of departments, principals and central office administrators who have managerial roles. It is the Committee's view that the training of administrators at all levels warrants a higher priority within the staff development provisions than it now receives.

4.81 The Committee noted a paucity of avenues for teachers to pursue first or higher degrees with emphasis on TAFE that would open up job opportunities in administration and research. The nation needs persons with relevant experience and professional qualifications to interpret the purposes, methods and aspirations of TAFE to the community and to communicate professionally with administrators in other sections of education. In this regard the Committee believes that considerable benefits could be derived in particular cases by having selected members of staff participate in various types of overseas study programs.

4.82 The Committee appreciates that implementation of an in-service training and staff development program will pose organisational problems especially in the scheduling of substitute or alternative teaching arrangements to facilitate the absence of staff for study purposes. Nevertheless, it hopes that the TAFE authorities concerned will accept the challenge and plan to arrange for teachers to benefit from
in-service education for any of the reasons or by any of the means already discussed. It considers that the authorities concerned should use the period up to the beginning of the triennium 1976-78 to work out criteria or procedures that will ensure that paid absence for study is used for the purpose intended.

4.83 The Committee considers that consistent with national policies being advocated in respect of systematic in-plant training, education authorities should also look to the systematic on-going training of non teaching staff. Workshop and laboratory staff and others can be made more efficient through systematic training methods. Finance for this purpose was earmarked in 4.11 (see also 4.39).

4.84 The Committee believes that each State is in the best position to work out within a budget its own in-service education and development program for full time and part time staff, and to this extent it proposes an amount be provided to each State having regard to the number of full time teachers reported in the Survey described in Appendix A.

4.85 The Committee recommends that:

(5) A specific purpose recurrent expenditure grant should be made available to the States for the sole purpose of in-service teaching staff development programs as follows:

Table 4.5: Recommended Specific Purpose Recurrent Expenditure Grant, In-Service Teaching Staff Development, 1 July 1974 to 31 December 1975 — Australia.

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Technical Training Fees Reimbursement

4.86 The States Grants (Technical Training Fees Reimbursement) Bill 1974 was passed by the Australian Parliament in March 1974. Its provisions reimburse the States for abolishing fees in government technical education, and relate only to the first six months of 1974. The Australian Minister for Education in his second reading speech announced that 'the total program of assistance to the States for technical education from 1 July 1974 onwards is to be reviewed following consideration by the Government of the recommendations of the Australian Committee on Technical and Further Education'.

4.87 For the purposes of the Bill, fee abolition applies to full time, part time and correspondence courses conducted in training institutions administered or maintained by government authorities, except 'adult education courses as they are mainly of a hobby or general interest nature'. Fee abolition applies not only to tuition fees but also to related charges such as examination, enrolment and registration fees. Other charges, including the fees of various student organisations, will remain the responsibility of the students. The speech indicates that the determination of the courses and types of fees to which fee abolition applies was made in close
consultation with the appropriate authorities in the States. In arriving at the amounts for reimbursement, account was taken of expected fee increases in 1974 and of current enrolment estimates, but should actual enrolments exceed the estimates substantially, the States may seek supplementary amounts.

4.88 The Committee draws attention to the fact that fees are still chargeable for the adult education stream. The problems of access to TAFE were discussed in Chapter 1 and the Committee has noted on a number of occasions throughout the Report its belief in the benefits of having more than one body providing adult education. It noted the 1973 ACTU Congress Resolution on Continuing Education which included the sentence, 'The educational needs and expectations of the community require that education be available so that people will be free to engage in it to meet their own needs, vocational or non vocational — at times appropriate to their own personal development and situation'.

4.89 Having regard to 4.88, and consistent with its objective of making the concept of recurrent education a practical reality in Australia, the Committee considers that individuals should be encouraged to re-enter the educational stream at any type of institution they choose whether or not it is government administered or maintained. It is not known to what extent, if at all, abolition of fees for adult education courses would attract more persons into courses. The Committee considers this should be tested experimentally. Notwithstanding past studies of a coupon or voucher system of assisting individuals to pay for further education — vouchers whose value is reclaimable from the Australian Government — the Committee considers that the proposed Australian Commission on Technical and Further Education, in its study of providing bodies in the adult education stream, should experiment in a rural area, and one of the less affluent suburban areas of a major capital city, with a voucher system which would allow the holder to exchange his credit for a specified period of technical and further education, including adult education, in an institution of his choice. In such a way, the test of experience can be applied to policy development.

4.90 The Committee is of the view that as soon as practicable the reimbursement method should be replaced by an appropriate formula whereby through recurrent expenditure grants the Australian Government could assist the States to extend the purposes to which technical college fees were previously applied. It is aware that policies concerning fees differed among the States and believes that States which previously did not charge fees for particular types of courses compared with the practice in other States should not be disadvantaged.

4.91 The Committee has drawn attention in previous Chapters to the technical colleges' characteristics of part time attendance and external studies. It has also revealed that until its recent survey relevant comprehensive statistics were not available. It has not, therefore, found it practicable to give any attention to devising a formula such as is envisaged in 4.90, but considers that the proposed Australian Commission on Technical and Further Education should set the necessary developmental work in train as soon as practicable. Until a formula is adopted the provisions of the States Grants (Technical Training Fees Reimbursement) Act 1974 should be renewed as required.

4.92 The Committee draws attention to the fact that grants reimbursing the States for the abolition of fees do not add to the States' available funds for recurrent expenditure purposes; they only change the source of these particular funds.
4.93 The Committee accordingly recommends that:

(6) $20 million should be available for distribution among the States in reimbursement for abolition of fees in technical colleges over the 3 six-monthly periods beginning 1 July 1974, 1 January 1975 and 1 July 1975 respectively, in appropriate instalments. The proposed Australian Commission on Technical and Further Education should by 1 April 1975 recommend adjustments, by an increase or reduction, of the instalment by the six months beginning 1 January 1975, according to actual relevant experience and statistics for the whole of the calendar year 1974. The proposed Commission should invoke Recommendation (30), Paragraph XXIX if appropriated funds prove inadequate.

(7) The proposed Australian Commission on Technical and Further Education should develop an appropriate formula under which the Australian Government could provide, by means of recurrent expenditure grants to the States, finance to be used for purposes to which technical college fees were applied during the year ended 31 December 1973. The formula should result in annual grants for each State not less than the finally adjusted grants for the calendar year 1974, as determined by Recommendation (6), but not necessarily in the proportion each State's grant bore to the grants for other States.

Community Colleges

4.94 Conclusion (24) pointed out that access to further education by many persons who reside outside the metropolitan areas could be facilitated by the development of community type colleges which could offer courses up to diploma level, and at which adults could take courses to make good omissions from or overcome deficiencies related to their primary and secondary schooling. These adult educational activities would be in addition to the range and level of courses customarily available from technical colleges.

4.95 The Committee noted Submissions which sought opportunities for further education to satisfy the intellectual and recreational needs of country communities. These Submissions looked for more rationalisation of educational facilities. Submissions from organisations representing technical college teachers devoted considerable attention to special needs of areas outside large metropolitan centres. They said there was a need for regional colleges, a wider range of courses, and transport and living allowances for those who need to move for educational reasons. The teachers suggested positive discrimination in favour of country areas so that educational opportunities equal those in the cities.

4.96 The Committee believes the concept of community colleges should be supported also for practical reasons of removing barriers to TAFE through geographic location and making efficient use of capital funds. It does not, however, advocate the concept as necessarily desirable everywhere, and for this reason does not envisage at this stage that proposals for community colleges would relate to locations other than non metropolitan centres which cannot support both a separate technical college and a full college of advanced education.

4.97 Conclusion (24) indicated that community colleges would need to have proper regard to practical economics and desirably to educational standards at other institutions to which students may later wish to transfer or from which they may wish to gain recognition for completed subjects. In this context, TAFE authorities developing proposals for community colleges should themselves arrange with other
appropriate authorities within their respective States for recognition of their courses, if they want this, as equivalent to those offered by these other authorities. The proposed Australian Commission on Technical and Further Education should try to assist State TAFE authorities on request and seek the collaboration of the Australian Commission on Advanced Education on matters of joint concern.

4.98 The practicability of developing the community college concept along the preceding lines will, of course, be affected by the Australian Government's willingness to support it financially. As a matter of principle, the Committee envisages that selected courses in proposed community type colleges would be funded at no less a rate than applies to similar courses in colleges of advanced education. It envisages, however, that community colleges would not duplicate courses already available in colleges of advanced education accessible geographically to students roughly within a radius of thirty miles from a college of advanced education. The funding of the selected courses should be along lines agreed jointly by the proposed Australian Commission on Technical and Further Education and the Australian Commission on Advanced Education. Funds for community colleges should not be channelled through more than one Commission but acceptance of courses for funding purposes should be a matter for decision by the Commission within whose terms of reference the subject falls.

4.99 Submissions pointed to the desirability of making suitable student residential accommodation available in conjunction with community type colleges and the Committee believes this to be realistic. It is of the view that residential accommodation at community colleges would facilitate the development of block attendance and other course patterns in all streams of vocational education over more parts of Australia than presently applies.

4.100 In most States the TAFE needs of the community are already being met by a range of universities, colleges of advanced education, technical colleges and evening classes as well as a variety of organisations such as the Workers' Educational Association, Arts Councils and the World Education Fellowship. In the sparsely populated areas, however, the coverage of educational opportunity is far from complete, particularly in respect of adult education.

4.101 The Committee believes that some existing technical colleges could be extended or adapted into community colleges and supports those States that already have this in mind. Alternatively some community colleges might develop first as colleges offering the Preparatory and Adult Education Streams, progressing by stages to include courses with vocational orientation.

4.102 Overall, in the Committee's conception, a community college should provide a focal point from which the local community's needs can be met. The emphasis should lie in the breadth of its educational offerings particularly as it contributes to the enrichment of members of that community. Such a college should be prepared to engage in whatever co-ordinating work is required in local education and cultural activities, and the college itself should be available to groups as a meeting place and practice area. The less frequent and by no means essential role is the provision of part or all of some diploma courses for which there is a need in the community. Clearly if the demand is such that a group of students of reasonable proportion is anxious to study a diploma course then a community college should respond.

4.103 The day-to-day administration of community colleges should, in the Committee's view, provide for community involvement from the outset, with college
autonomy as the objective. The proposed Australian Commission on Technical and Further Education should require as an integral part of a proposal for a community college, a college council chaired by a person outside the college and having secretarial assistance independent of the college.

4.104 The Committee recommends that:

(8) $56,000 should be made available for distribution among States wishing to prepare proposals for community colleges and schemes for financial assistance. Proposals should include arrangements for a Community College Council, provision for a wide range of preparatory and bridging courses, courses for adults, including primary and secondary schooling, and liaison arrangements with other post school institutions in the State with complementary programs. The drawing rights for each State should not exceed $16,000 for New South Wales, $12,000 for Victoria, $8,000 for Queensland, $8,000 for South Australia, $8,000 for Western Australia, $4,000 for Tasmania. The proposed Australian Commission on Technical and Further Education should discuss State proposals with other education Commissions, as appropriate.

Library Resource Centres

4.105 The Library Resource Centre (LRC) has a major role in making unrestricted access to recurrent vocational education a practical reality. Just as the need has been seen over the last ten to fifteen years to improve the libraries of the universities, the colleges of advanced education and the schools, so it must be seen in technical colleges.

4.106 In TAFE for subjects at all levels there is recorded information which can be at the disposal of the student. The LRC should be open for the longest span of hours that will meet the convenience of most students who, with teachers, should be stimulated to use it for the reinforcement of teaching or to discover other possible approaches to and different treatments of specific subjects and topics. The LRC should be one means of facilitating self paced learning. And, most important, the LRC must have a staff large enough and good enough to ensure that all teaching staff and students know how to use it.

4.107 One reason for the urgency in developing an LRC in each college rests on library developments in primary and secondary schools whose students will emerge with expectations of library facilities as part of the technique of learning. The Committee has found that the present libraries in technical colleges range in quality from mediocre to appalling, and clearly cannot in their present state meet these expectations.

4.108 Further statistical information about libraries obtained during the Committee's Survey is included in Appendix A. The Committee considers that the library situation is markedly worse now than in 1966 when the First Report of the Commonwealth Advisory Committee on Advanced Education harshly criticised technical college libraries as they then were. Many colleges still possess no library resources apart from small departmental collections for teaching staff to which students often have no access. A proportion of the bookstock in existing libraries is obsolete and should be removed from the shelves. In colleges where library staffs exist, staff numbers are very small and the majority of staff are not equipped for the demanding role implicit in the notion of the LRC as a learning resource. Where new library accommodation has been provided over the last few years in the institutions visited by the Committee, it has been given inadequate space, and because of its
location could not be conveniently extended. With the notable exception of South Australia, audio-visual resource provision is almost non-existent.

4.109 Technical college libraries are poor because so little has been spent on them. TAFE administrators, although acknowledging this, are prone to lay the entire blame on the inadequate financing of technical education. This has unquestionably been a major limiting factor, but the relegation of libraries to a very low priority in the total teaching scheme by teaching staff, college principals and head office administrators is the main reason so little has been spent on them in recent years.

4.110 In the majority of States and most colleges, library books average less than two per student. The average expenditure on library materials is approximately $1.40 per student per annum. Whereas the universities and colleges of advanced education spend between 4 per cent and 12 per cent of their total recurrent expenditure on library resources and services, technical colleges spend on average 2.4 per cent* for this purpose. The proportion of State technical education recurrent expenditure allocated to library provision in 1972-73 was: Victoria 3.8 per cent*, New South Wales 2.2 per cent, Western Australia 1.4 per cent, South Australia 1.3 per cent, Tasmania 0.7 per cent and Queensland 0.2 per cent.

4.111 The concept of the library as an LRC has not received much attention, and it could be that too many teachers read little beyond standard texts in their subject areas. Having practical backgrounds and not having been trained to make constructive use of information resources, they are not in a position to ensure that their students make effective use of them. There seems to have been an unquestioning acceptance by some technical college authorities and teachers of the maxim ‘apprentices don’t read’. This generalisation just cannot be true, as case histories of so many apprentices can show.

4.112 Some younger teachers whose training included the use of resource materials have positive ideas and attitudes towards learning resources, and it is essential for appropriate in-service courses to be conducted to bring all teachers and administrators of colleges generally to a point where they can make informed judgments.

4.113 Library services should be available to all students for whose education the technical college accepts responsibility. The provision will inevitably vary with the size and composition of the college. Some colleges are not at present large enough to justify full resource centres and other arrangements may be needed to ensure that staff and students are not denied access to a range of learning materials. In the Committee’s view, each college with more than one thousand individual student enrolments should contain its own fully functioning centre.

4.114 Standards. In the course of the Committee’s visits to the colleges, many administrators and librarians sought guidance on the size and quality of library services for which they should plan. The Committee recognises that the establishment of standards is basic to any recommendations it makes concerning library development and sees the formulation of appropriate standards as a priority task.

*As with other sections of expenditure in Victoria, some difficulty has been experienced in separating the technical college expenditure from that of the technical school and college of advanced education components. In this case, the separation has not been pursued by the Committee.
4.115 In the meantime, some possible interim guidelines* are set out in Appendix E. Some broad considerations are discussed in the paragraphs that follow.

4.116 **Buildings.** An LRC must be planned and constructed with proper regard to the educational needs of the particular institution. The building program should be prepared as an integral part of the master plan of the institution. The LRC should, whenever possible, be centrally situated and, within the limits of the site area, capable of expansion. It must be designed for an immediate function, but with a minimum of permanent fixtures outside the service core so that the building will be adaptable to changes in any of its requirements.

4.117 In larger colleges the LRC should be constructed as a separate building or in conjunction with student service units, although some of the space may be more economically used by other college functions for some time ahead. Provision must be made for subsequent expansion in smaller colleges also. Planning for new libraries should try to predict needs 15 to 20 years ahead, and yet adequate provision is not being made for LRCs in many new building plans.

4.118 It could be many years before all colleges can be provided with LRC buildings of the necessary standard. The Committee believes, however, that there are advantages in providing in each State for an LRC to be developed in an established college of not less than one thousand student enrolments that can serve as a model for more general provision.

4.119 Accordingly, the Committee recommends that:

(9) **States individually should be invited to design to the pre contract stage one model Library Resource Centre in an established technical college with an enrolment of not less than 1,000 students, and seek approval for the project to proceed. $200,000 should be available for distribution among the States for planning purposes, on request.**

4.120 The Committee also recommends that:

(10) **$0.56 million should be provided for the improvement of existing LRC accommodation in those colleges with library staffs which are not covered specifically by other building proposals, as follows: $180,000 New South Wales, $135,000 Victoria, $130,000 Queensland, $55,000 South Australia, $45,000 Western Australia and $15,000 Tasmania.**

4.121 The Committee further recommends that:

(11) **Each State should develop a program for LRC construction for discussion with the proposed Australian Commission on Technical and Further Education as a guide to LRC provision in future triennia. The proposed Commission should make provision in its organisation for advice on these matters to be available to the States on request.**

4.122 **Resource Materials.** The Library Resource Centre should contain a comprehensive range of learning materials in different formats for use by teaching staff and students. The full resources of the LRC will include all or most of the following:

- print: books, periodicals, newspapers, standards, patents, reports, pamphlets, off prints, photocopies;

*The Library Association of Australia regards these guidelines as a significant first step towards satisfactory standards for technical college libraries. It recognises that the guidelines should be reviewed periodically in the light of improvements made.*

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non print: maps, charts, globes, plans, circuit diagrams, prints, photographs, 35 and 16 mm films, audio and video tapes, loop films, cassettes, microforms, overhead transparencies, filmstrips, slides, records; sectionalised models, and working models.

A selection of fiction and general reading of many kinds should be included.

4.123 Substantial and continued financing is essential if library resources for TAFE are to be developed to the stage where they can actively support the educational process in technical colleges. Accordingly, the Committee recommends that:

(12) **Funds should be earmarked from general purpose recurrent expenditure grants for the acquisition of library resource materials and the associated equipment in technical colleges.** Priority in allocating subsequent grants among individual colleges should be given to those with full time library staff. States should be encouraged to take immediate steps to improve the LRC staffing levels.

4.124 **Staffing.** Staffing is the most immediate need if LRCs are to develop in technical colleges as envisaged. The Library Association of Australia submitted the view to the Committee that without staff that is adequate in terms of numbers, quality of professional education and experience, a resource centre will not function effectively. Very few of the staffed libraries at present are able to realise their potential because of the heavy pressures on their overworked and often inadequately qualified staff.

4.125 The basis of the LRC staffing structure must be the appointment of staff with qualifications and experience relevant to the specific tasks on which they are engaged. Clearly, without a substantial increase in staffing at all levels — librarians, library technical assistants, clerks and typists, and media specialists — there is no prospect of any appreciable improvement in the standard of services offered by the LRCs to college staff and students.

4.126 A shift in emphasis from classroom instruction to self learning will require a much greater degree of integration of self learning aids into TAFE courses. While the primary responsibility for this must rest with the teaching staff, librarians have a particular role to play in ensuring that their teaching colleagues are aware of the range of resource materials available, and in encouraging them to use these materials as integral and essential parts of their programs of activities. It would obviously be advantageous if senior members of the LRC staff have the academic background and experience in libraries that will permit them to play a proper role in the college’s educational program. In larger colleges professional librarians should constitute a reasonable proportion of the staff.

4.127 In the Committee’s view, courses should be available in every college on the use of LRCs to best advantage, and information on the use of LRCs should form part of every vocational program of study.

4.128 The Committee considers that the general purpose recurrent expenditure grant should be used in part as indicated in 4.11 to improve the staffing position in LRCs.

4.129 **Training of LRC Staff.** The Committee is aware of the serious nationwide shortage of qualified staff in many of the categories discussed above. Experienced professional staff can be recruited from the libraries of other institutions, and newly qualified staff from the university and college of advanced education schools of librarianship. However, to attract and retain staff of the right calibre, salaries and
conditions should be comparable to those obtaining for similar responsibilities elsewhere.

4.130 To provide a much needed increase in the number of professional staff available the Committee recommends that:

(13) States should arrange training to increase professional staff available for libraries in TAFE institutions. The numbers offered training immediately should not be less than 10 in New South Wales, 10 in Victoria, 5 in Queensland, 5 in Western Australia, 5 in South Australia, and 2 in Tasmania and funds should be earmarked accordingly from general purpose recurrent expenditure grants.

4.131 The Committee was informed that trained support staff is also in short supply.

4.132 TAFE departments in all States should accept the responsibility for training technician staff for their own libraries, and the Committee recommends that:

(14) An initial grant of $25,000 should be offered to each of the States to train library technicians for technical college libraries and the States should be invited to submit proposals indicating their needs for additional staff and the likely cost.

4.133 Bibliographic Centres. The Committee was concerned to note during its visits to the colleges the high proportion of library staff time taken up by routine acquisitions, cataloguing and processing activities at the expense of reader service work. Book and media selection must, of course, remain the responsibility of the individual college, but the Committee considers that the establishment of centralised acquisitions and cataloguing services, particularly in Tasmania, South Australia, Queensland and Western Australia, would offer considerable advantages both to individual colleges and to the TAFE authorities generally.

4.134 A Centre within a State could provide the following facilities:
   (a) a centralised acquisitions service;
   (b) a centralised cataloguing service;
   (c) a State union catalogue of print and non print materials;
   (d) a centralised inter library loan service.

4.135 The Committee feels that a Bibliographic Centre on this scale in each State can be justified on the grounds of both efficiency and economy. The greatly increased scale of operations resulting from centralisation should facilitate the recruitment of qualified staff to undertake essential technical services and the development of cooperative arrangements for sharing resources. It should help to reduce the total expenses incurred in the selection, acquisition and cataloguing of library resource materials and the duplication of resources resulting from unco-ordinated library development in many separate institutions. Furthermore, the staff of the individual college LRCs, once free of the bulk of technical service activity, should be able to concentrate on their primary functions of reader service and reader education.

4.136 For these reasons, the Committee recommends that:

(15) The States should be assisted financially to carry out feasibility studies and cost-benefit analyses of the establishment of bibliographic centres, and submit any resulting proposals. $20,000 each should be granted to New South Wales and Victoria for this purpose, $15,000 each to Queensland, South Australia and Western Australia, and $10,000 to Tasmania.
4.137 The Committee is aware that it will take some considerable time for the States to establish and recruit staff for these Centres, but believes that the basic organisation should be planned before the end of 1975. In the case of New South Wales, which already has an operating centralised service, the reassessment of that service under more satisfactory conditions should also be completed.

4.138 **Central Resource Centres and External Studies.** The Committee considers that the LRC provision for external studies merits special consideration. It reaffirms its view that each State's external studies arrangements should form the major activity of a Central Resource Centre containing a large variety and quantity of print and non print media. This Central Resource Centre should provide all types of resource materials for external students and should serve as an additional source of material for the staff and students of colleges and for LRCs.

4.139 The Committee recommends that:

(16) *The finance earmarked in Recommendation (2) to develop central resource centres should have special regard to library needs of external students.*

4.140 **Co-ordination of Libraries.** Within its own locality each technical college LRC should co-operate closely with other libraries, both public and institutional, to improve overall library service both to its own staff and students and to the community at large. The development of an information service to local industry by a technically oriented college would provide added justification for the investment of public funds in a comprehensive technical reference collection, covering standards, patent literature, and a wide range of relevant abstracting and indexing publications.

4.141 As well as serving students and teachers, libraries in TAFE institutions should be accessible to members of the community at large. In fact, the colleges should take active steps to encourage industry and commerce to make use of them.

**Australian TAFE Technology Centre**

4.142 State TAFE authorities are producing multi-media materials and these are usually discussed in the context of teaching aids, and as aids associated with correspondence courses. The usual types of aids are listed above in 4.122.

4.143 The Committee noted that some States are turning their attention, as one said, to 'resource centres ... in a firm conviction that students in technical education have the basic right to pursue their studies both in breadth and depth', and as another said, 'the facilities of a resource centre are available to students at the college, to industry, to commerce, to other educational institutions, and to appropriate members of the general public'.

4.144 These developments in the States should be stimulated by the funds earmarked in the general purpose recurrent expenditure grants for library resource materials and equipment and Central Resource Centres. They should enable TAFE to be promoted generally and to make the means to recurrent education available to the greatest possible number.

4.145 The Committee believes, however, that technology has an even more significant role in vocational education than is generally discussed. It has noted that on average 80 per cent or more of the States' recurrent expenditure on technical and further education is accounted for by salaries and wages of teaching and non teaching staff. It will be seen from Figure 4.1 that relatively less funds are being devoted annually to other recurrent expenditure such as equipment, supplies, minor maintenance, repairs, and the like.

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Figure 4.1: Teachers Salaries, Non-Teachers Salaries, and Other Recurrent Expenditure as a Percentage of Total Recurrent Expenditure 1970-71 to 1972-73; (A) Each Year by State, (B) Each State by year.
4.146 It would appear that the continual rise in expenditure on salaries has taken place to the detriment of spending on technological innovation and the associated research. Unless the productivity of teaching strategy can be improved in TAFE, vocational results will not increase correspondingly with increases in educational expenditure. In other words, the multiplication and diversification of educational activities will necessarily be limited to almost a pro rata increase in the number of educators which itself is subject to the limitations of national manpower and job opportunities in alternative attractive occupations.

4.147 The Committee considers that the use of technology to relieve the pressures on teaching resources and, in some respects, to substitute self learning for classroom teaching lags behind the advance of technological ingenuity.

4.148 The Committee recalls the accelerating social effects of new techniques of communication, including computers and colour television, and increasing sophistication in their production and use. These techniques and production methods could well be the basis of new strategies for self paced learning in TAFE. It is of the view that technology must be developed for or adapted to TAFE in such a way as to redistribute and make better use of its teachers. It proposes a Centre in 4.44 and one is assumed in 4.163.

4.149 As anticipated, the Committee recommends that:

(17) An Australian TAFE Technology Centre should be established as a company limited by guarantee for the purposes of adapting technology to vocational education, and of researching, developing and producing learning and other educational aids by itself or through others. The Centre should also serve as the clearing house for relevant research, disseminate information from abroad, commission relevant research, publish a journal, arrange when appropriate for the publication of text books, admit for periods of training administrators and other persons with experience in technical and further education, and arrange such other matters as may be desirable from time to time. Finance should be provided through the Australian Minister for Education in such a way as to make the Centre financially accountable to him, but otherwise the company should operate on business like lines and attempt to break even on production activities.

Research

4.150 Little systematic, on-going research directly in the field of TAFE has occurred to date in Australia other than in some of the State Departments. However, TAFE is a part of the educational system with some elements in common with other components. Thus the findings of some of the studies sponsored by the Australian Commission on Advanced Education and the Australian Vice Chancellors' Committee have some applicability; for example, those on the nature of occupations, on audio-visual systems and on small group interaction and learning.

4.151 Most changes that have occurred in TAFE have been based on experience imported from overseas; for example, the introduction of block release courses or on the personal conviction of influential individuals. The evaluation of the changes that have occurred has normally been perfunctory. Few courses have clearly defined objectives stating the course intent and the characteristic features; i.e. skills, knowledge and attitudes which it is hoped will be present in the successful graduate. Hence it is difficult to formulate without ambiguity a set of criteria on which to base a systematic evaluation of the course effectiveness except in terms of knowledge acquired by students at a particular time during the course. Some research studies
have been performed by State Education Departments but the results have rarely been published. Studies of wastage from courses have seldom been carried out, although the findings of such studies may have some general applicability and assist in the reduction of wastage in future courses.

4.152 The Committee considers that this situation is no longer acceptable and that steps should be taken to ensure that systematic evidence and information concerning the vital aspects of TAFE, such as the nature and effect of courses, and student learning and motivation, will be widely published and form the basis for future decisions.

4.153 A major change which the Committee wishes to encourage, as indicated in earlier Chapters, is a shift from blackboard centred, group based instruction, hierarchically organised and focused on the acquisition of traditional skills to the creation of an adult learning environment organised by dynamic leaders who are aware of the most effective learning/teaching procedures. Research must have the development and evaluation of the latter as a prime focus over the next decade. The development, production and evaluation of learning materials and educational technology will require a substantial research effort from the Australian TAFE Technology Centre proposed in 4.149.

4.154 Although the organisation and content of the initial preparation of teachers are outside the terms of reference of this Committee, it is clear that the shift towards student learning centred activities referred to above can be achieved only by a substantial change in both the attitudes and abilities of teachers entering TAFE. Experimental programs of teacher education will need to be introduced as soon as possible and be evaluated at all stages to determine their effectiveness.

4.155 In Conclusion (14) it was indicated that external studies courses should be available to people regardless of place of residence. Thus, in further education, since students are more mature, external courses in addition to providing a route to formal qualification for those who are prevented by work or other reasons from attending a TAFE institution, should offer a desirable alternative to formal classroom attendance for those who prefer home study. There is much unknown about the most effective approaches to external studies and there are many problems. Accordingly, as anticipated in 4.21, the Committee recommends that:

(18) $100,000 should be made available for special purpose research into determining factors underlying the effectiveness of current practices and techniques of external studies. Proposals for such research should be invited immediately from relevant research organisations, academic institutions, and government departments or authorities, and assessed by the proposed Australian Commission on Technical and Further Education.

4.156 Advantage should be taken of the limited research facilities available in some State Departments, and also of the experience of their staffs, in identifying occupational trends through industrial surveys and in establishing job profiles and their associated education/training requirements. This work should be expanded and where possible be conducted co-operatively as a joint project among the States to enable the findings to have greater applicability throughout Australia. For many of the occupations surveyed it should be possible to reach general assent on course length, ratio of theory to practice, and range of electives. This work is intended to provide the basis for more effective technology components in college curricula — not to serve as a means of providing immediate and specific skills/training for a
particular job. This does not lessen the Committee's interest in specific skills training. The general purpose recurrent expenditure funds which have been earmarked, among other things, for curriculum research should include joint projects among States in those areas where agreement is likely to be reached on common course structures.

4.157 Four types of research and development are seen as important by the Committee:

(a) Research concerned directly with 'what' will work best in TAFE rather than 'why' or 'how' it works and directed towards obtaining answers to specific questions peculiar to the system with its known constraints of teachers, buildings, finance, etc.: questions such as 'What techniques will work most effectively to teach what content and process to whom?'

(b) Research and development arising directly from information generated by or on behalf of the Committee. An example of this latter type of work which clearly is a particular example of systems centred research is a study of the question, 'Are full time teachers more effective than part time teachers?' and would involve the isolation and co-ordination of existing information concerning student success and failure related to the qualifications, status (full or part time) and experience of the teachers conducting the classes.

(c) Student centred research — a common technique in special education and clinical medicine but not in common use in education. The person is studied rather than the group and special statistical techniques are adopted. Claims are made that the results from this type of research are more readily applied in the classroom than traditional research results. This type of research would appear to lend itself readily to support for individual based instruction as described above, and to be particularly appropriate for studies on the slow learner in trade courses or those with particular problems in learning mathematics.

(d) Open ended basic research in fields such as psychology and sociology which have wide applicability but may provide information of particular value to TAFE if directed towards studies on adult and adolescent learning and motivation.

4.158 In Conclusion (18) the Committee stated its concern to step up the pace and volume of research relating to access and to problems of literacy, student assessments, technology and other matters. Within this general objective the Committee considers that the specific studies to receive priority should include:

(a) The learning environment: the relative effect of group, classroom or laboratory teaching in comparison with individual media and machine based learning; the effect of course level, age, maturity of student, group composition and sociology on learning effectiveness; learning difficulties of adults. Composite traditional and audio-visual approaches, e.g. the Postlethwaite approach to biology teaching where the student is free to organise his program according to his own needs, from an audio-visual tape collection which is available almost at any time the college is open, practical work from laboratory sessions held over a number of days to which he is not allocated a specific 'group' time, some formal lectures, and well organised tutorial sessions. Much of this type of study should be undertaken in the proposed Australian TAFE Technology Centre.
(b) The relative effectiveness of different attendance patterns such as evenings only, day or day plus evening, block release, sandwich and full time (concurrent with and pre employment). Studies might include: aspects of motivation and hence wastage; 'tiredness' after a day's work and learning effectiveness; differential effects at trade and certificate level; and the effectiveness of the integration of theory with on the job training.

(c) Access to vocational education and the problems of disadvantaged groups, note being taken of current and proposed work by other bodies such as the Commonwealth Enquiry into Poverty: the slow learner, students with special problems in mathematics or English; social and language problems of ethnic groups; motivation of students with social handicaps. Much more also needs to be known about the social characteristics of the technical college population.

(d) Development of new curricula to meet technological, social and other change; formative evaluation during the developmental stages to ensure that the course components are appropriate for the general vocational intent, and can be taught effectively by the teachers and can be assimilated by the students; 'summative' evaluation of the completed curriculum to ensure that the course graduates in industry or commerce have gained the skills and attitudes intended. The development of effective methods for broadening students' social awareness.

(e) Cost effectiveness studies.

(f) Development of improved and more valid methods of assessment of students' educational achievements and more efficient methods of student/college/employer communication. The fostering of methods whereby progress in learning outside formal teaching institutions can be identified and credited to the individual by way of formal qualifications.

4.159 In adult education there is merit in focusing attention upon studies of the evaluation of courses, the selection of part time teachers, the relationship between course costs and course populations, access to adult education, special or informal course accommodation related to course effectiveness, and more general studies as to why persons either attend or shun adult education classes, related particularly to social background.

4.160 The Committee recommends that:

(19) An initial sum of $300,000 should be made available for research into technical and further education as follows:

(a) Topics selected by the proposed Australian Commission on Technical and Further Education as being of major importance should be publicised and the bulk of the research grants allocated to researchers interested in pursuing any of these projects;

(b) To ensure that emerging problems receive attention a general invitation should be given to any qualified person interested in conducting research in any aspect of TAFE, and a specific invitation to teachers;

(c) Staff in the colleges should be encouraged to participate in research projects initially perhaps as co-workers with experienced researchers;

(d) Some long term funding arrangement should be investigated to ensure that qualified and experienced workers are not lost to the area at the end of particular projects.
4.161 For the development of research activities the technical colleges are in a less fortunate position than the universities or the colleges of advanced education where a substantial proportion of the staff have had varied research experience. Moreover, most of the research in TAFE will need to be carried out in the next few years by staff recruited from other fields of educational research who have had experience neither as students nor as teachers in the system to be investigated and will have the disadvantage of unfamiliarity with what is perhaps the most diverse and complex form of post school education. Special precautions will therefore need to be taken to ensure that the research is conducted in a purposeful way and thus the Committee considers that the proposed Australian Commission on Technical and Further Education should make provision within its structure to approve, supervise or coordinate research projects.

4.162 The Committee is deeply aware of the scarcity of persons with TAFE knowledge and experience who also have research skills. To help correct this situation the Committee believes that training opportunities in research methods should be made available for technical college teachers and accordingly recommends that:

(20) $150,000 should be made available to TAFE authorities in the States upon application to the proposed Australian Commission on Technical and Further Education for the purpose of training technical college teachers in research methods.

4.163 To be effective in changing established classroom practice it is essential that research reports, in addition to describing the extent and nature of the investigation, should have sections clearly outlining the findings which, where positive, should be developed further and appear in print as positive recommendations for trial or action. The proposed Commission should ensure that each research grant eventually finds expression in a publication of this form — without it the research findings may be valid but valueless. The main vehicle of publication should be the journal published by the proposed Australian TAFE Technology Centre. This should be a prestige journal intended for teachers as much as for educational researchers elsewhere and it is desirable that it be as free as possible from unnecessary educational jargon which clutters so much of the educational research literature. Another purpose of the journal will be to attract professional researchers because of the opportunities it will provide for them to satisfy their aim of publication that can lead to status and prestige. The journal should be produced initially on an occasional rather than a regular basis.

SURVEY OF CAPITAL NEEDS

4.164 Table 4.6 sets out the capital need as estimated by State TAFE authorities to 1981 (in 1973 values) in response to the Committee's Survey. The latter sought information on what was necessary to bring existing facilities to a satisfactory standard, and to satisfy anticipated requirements for TAFE until 1981, assuming no change in its character. (Completed questionnaires were not received from the N.S.W. Department of Agriculture, and its needs will have to be assessed separately at a later date.)

4.165 In addition, the Committee arranged to visit a number of colleges in each State.

4.166 At its request, it was shown what the TAFE authority in each State regarded as the best and the worst college conditions in the capital cities and adjacent areas.
Table 4.6: Questionnaire Survey of Capital Expenditure Needs: States' Assessments for Period 1 July 1974 to 31 December 1981.

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<th>Item</th>
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<td>1.1.76 to 31.12.78</td>
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<td>Equipment and Minor Works</td>
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<td>4.312</td>
<td>5.706</td>
<td>11.731</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Total</td>
<td>11.199</td>
<td>26.192</td>
<td>25.625</td>
<td>63.016</td>
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<tr>
<td>SA</td>
<td>Land</td>
<td>2.634</td>
<td>—</td>
<td>0.900</td>
<td>3.534</td>
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<tr>
<td></td>
<td>Equipment and Minor Works</td>
<td>3.575</td>
<td>8.180</td>
<td>25.607</td>
<td>37.362</td>
<td></td>
<td></td>
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<td>Total</td>
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<td>WA</td>
<td>Land</td>
<td>6.210</td>
<td>—</td>
<td>1.500</td>
<td>7.710</td>
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<tr>
<td></td>
<td>Equipment and Minor Works</td>
<td>1.818</td>
<td>1.080</td>
<td>1.450</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Total</td>
<td>27.453</td>
<td>22.968</td>
<td>24.691</td>
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<tr>
<td>Tas</td>
<td>Land</td>
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<td>0.044</td>
<td>0.984</td>
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<tr>
<td></td>
<td>Equipment and Minor Works</td>
<td>1.053</td>
<td>2.170</td>
<td>2.278</td>
<td>5.501</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.670</td>
<td>22.451</td>
<td>16.509</td>
<td>43.630</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Total — All States</td>
<td>116.416</td>
<td>274.304</td>
<td>256.618</td>
<td>647.338</td>
<td></td>
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<td></td>
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</tbody>
</table>

The differences in age and condition of college premises were extreme, more so in some States than in others. Attractive, modern, well preserved and equipped buildings contrasted with old, cheerless structures some of which appeared to contravene fire, health and planning ordinances.

4.167 The Committee saw evidence of the low priority accorded student welfare facilities — or, as one teacher stated, student territory — in most colleges, and also how any such provision was subordinated to demands to expand class accom-
modation. This low priority carries over into new plans for long term redevelopments in which the provision of teacher/student amenities is in some cases to be delayed until the final stages of several years of construction, and then added rather as an appendage than included as an integral part of the whole.

4.168 Shifting the emphasis in TAFE to the needs of the individual as envisaged in Chapter 1 should ensure that the physical welfare of student and teacher is not neglected and that its provision promotes a dignity of educational purpose in technical colleges. The new emphasis should direct attention to the need for adequate hygiene and toilet facilities, lockers, change rooms, and food services. Study and welfare arrangements should be comparable for all students whether they are pursuing a full time or part time pattern of attendance. Where, however, services such as expensive car parks are provided in some locations consideration should be given to imposing a charge on the users; in normal circumstances the proposed Australian Commission on Technical and Further Education should not support the purchase of city land for car parking purposes.

4.169 As a matter of principle the Committee considers that proposed buildings should be recommended to the Minister for approval only when welfare facilities for student and teacher are accorded no less a priority than classrooms, workshops and laboratories, and take their place in the building schedule accordingly. They should be scheduled for the early stages of construction so that as a college complex grows, its new students will find them established and be more likely to use them to advantage.

4.170 The Committee noted that provision was not generally made in new buildings for access by physically incapacitated students. Whatever the cost implications the Committee believes that physical access to technical colleges would encourage potential students from among the physically disabled, and should be part of the design. Useful design information is contained in Australian Standard CA52, Part 1 — 1968 Design for Access by Handicapped Persons, Part 1 — Public Buildings and Facilities, available from the Australian Council for Rehabilitation of Disabled.

4.171 The Committee saw redevelopments of some sites which it considered should have been abandoned because they are basically inadequate for their purpose. To avoid future problems inherent in buildings on unsatisfactory sites the Committee considers that land purchase should have priority in capital expenditure for the rehabilitation of technical colleges throughout Australia. The Committee will, however, pay special attention to what it regards as an undesirable tendency to expand or over-develop existing technical colleges on already congested inner suburban sites. When a new site is considered necessary as a replacement for an existing inadequate site, the Australian Government’s financial assistance should exclude the market value of the old site at the time it is abandoned.

4.172 It seems reasonable to assume that equivalent courses in TAFE will involve common costs regardless of where the college is located, except for special considerations that variations in climatic conditions may impose. Building standards for colleges should have regard to the reasonableness of costs. In the Committee’s view, the proposed Commission should arrange an attempt to draw up unit standard costs, with variations for differences in locations, outside of which it will not recommend that building proposals be financed wholly from Australian Government funds.
4.173 Hurried project planning, apparently to achieve capital expenditure targets, has resulted in some unsatisfactory designs and there are examples where, in the Committee's view, better use could have been made of the capital funds employed. Nevertheless, the Committee saw some examples of good forward planning of sites by stages into the 1980s and in future would expect such planning to be available for all sites in all States as a matter of principle.

4.174 In some States procedural demarcations between various departments produce situations where planning cannot be started without a prior formal assurance from the Australian Government that construction funds are or will be available. This kind of rigidity will hamper the pace at which the technical college systems can be rehabilitated; the Committee therefore proposes to recommend that funds be earmarked for forward planning without commitment regarding construction funds. It hopes State Governments will put these funds at the disposal of the TAFE authorities so that in appropriate circumstances outside consulting architects may be employed.

4.175 The Committee understands the impartiality of the rota system of selecting consulting architects for technical college designs. It feels, however, that a more efficient use of space may result if specialists were permitted to develop in this field.

4.176 The use of standard furniture in workshops and classrooms, especially in Victoria, Western Australia and Queensland, for an intermix of sizes and ages in adolescents, young adults and mature adults highlights a need for more flexible design than has yet been achieved. The Committee is of the view that design of furniture and equipment deserves more extensive study than it has received in the past, and that the proposed Commission should try to arrange for collaboration among the States to this end.

4.177 Noise problems in workshops have still to be overcome. For example, noise levels in sheet metal work and metal forming were invariably high in colleges visited and students frequently and reluctantly had to wear ear muffs, if they were provided. Baffle walls, acoustic ceilings and panels that alleviate the problems have not yet become integral to designs. Internal corridors which are traffic areas have, within too many colleges, hard finished walls, ceilings and floors which would benefit from acoustic treatment.

4.178 Problems of heating, cooling and ventilation require a specialised local attention which was not generally evident. The Committee was concerned about inadequate provision for this important aspect of human comfort.

4.179 Practices vary considerably from State to State in respect of college workshop safety. The Committee was pleased to note in some States active college safety committees. There are, unfortunately, some technical colleges in some States whose workshop conditions breach industrial safety requirements. Technical colleges in all States should be required to meet at least the health and safety standards laid down for industry; they should be models of what students should expect to find in outside employment.

4.180 Workshop equipment varies in age and condition. While machines of 1940 and 1950 vintage may not meet modern workshop tolerances, they are not necessarily without use for learning purposes. Nevertheless, the Committee saw examples of obsolete machinery which reduce the instructors' effectiveness. In some cases, however, it may not be practicable to replace machines continually, and a
partnership between industrial undertakings and colleges should be developed which would enable students to undertake practical work on some of the latest specialised equipment. The States should explore the possibility of recompensing industry financially for such an arrangement where it is more economical for relatively small student numbers in particular courses, and forward appropriate propositions to the proposed Australian Commission on Technical and Further Education for consideration.

GRANTS FOR CAPITAL PURPOSES

General
4.181 The $647 million estimate derived from the Survey reported in Table 4.6 is the minimum capital requirement to 1981; it contains no provision for library development, residential accommodation for students attending colleges full time under block release arrangements, the development of college institutions to meet any increased demand arising from new manpower policies, and the more widespread adoption of recurrent education opportunities.

4.182 The Committee considers that total capital expenditure of the order of $1,000 million will be necessary to do all that has to be done before the end of the 1980s to give TAFE the status it should have and bring it within access of all who could benefit.

4.183 The Committee has assessed the capital expenditure needs of TAFE in educational terms, without regard to current pressures on manpower and materials. Whatever limitation the current economic situation places on funds for education should be shared by other streams of education, and priority for expenditure in technical colleges should not be less than that accorded universities, colleges of advanced education, and schools.

4.184 The Committee proposes matched and unmatched capital expenditure grants to cover equipment and minor works, land and buildings, student residential, and library resource centres.

Matched Capital Grants
4.185 The Committee was informed by the Minister that the Australian Government expects the States to maintain their previous rates of capital expenditure as the basic condition of further financial support.

4.186 The Committee, after considering accounting procedures in each State, has been unable to establish with confidence the actual rate of capital expenditure by all the individual States exclusively on that area of TAFE covered by its terms of reference.

4.187 From the limited information available, there appears to be wide differences in capital expenditure among the States from State funds exclusive of money that became available under the Technical Training Grants Acts. Apparent differences become pronounced when related to the distribution among the States of persons 15 years and over in the Australian population. The Committee was given to understand by the Department of Technical Education in New South Wales that it will spend, in the 1973-74 period, approximately $4 million of State funds on capital works for TAFE and it was anticipated that this rate of expenditure could continue into 1974-75. The Committee determined that on this basis other States could be expected to spend amounts proportional to their 15 years and over populations and
that States which spend in excess of these should receive special recognition by dollar for dollar grants for capital expenditure. The total proposed grant could be in the vicinity of $6 million if the Australian Government agrees and the States lay claim to additional funds after satisfying their base expenditure commitments.

4.188 Accordingly, the Committee recommends that:

(21) Each State should be entitled to a matching grant, on a dollar for dollar basis, for funds expended from its State resources on capital expenditure in excess of the following amounts. This grant is for capital expenditure on TAFE institutions and should be wholly at the discretion of the State concerned.

Table 4.7: Matched Capital Grants — Amounts in excess of which Dollar for Dollar Matching is Recommended for Period 1 July 1974 to 31 December 1975.

<table>
<thead>
<tr>
<th>State</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>6.000</td>
</tr>
<tr>
<td>Vic</td>
<td>4.500</td>
</tr>
<tr>
<td>Q’ld</td>
<td>2.200</td>
</tr>
<tr>
<td>SA</td>
<td>1.500</td>
</tr>
<tr>
<td>WA</td>
<td>1.200</td>
</tr>
<tr>
<td>Tas</td>
<td>0.400</td>
</tr>
</tbody>
</table>

Unmatched Capital Grants
4.189 During the first seven years of Technical Training Grants from the Australian Government to the States — 1964 to 1971 — the financial assistance was at the rate of $10 million per annum. The Committee has estimated that approximately $17 million in 1974 would be spent in purchasing the same amount of building construction and equipment as was required in 1964. In the Committee’s view, the States could, as an interim measure, cope with an expenditure of $35.179 million for land and buildings during the half triennium.

4.190 The Committee considers, however, that this is an unsatisfactory rate of expenditure to bring existing capital facilities in technical colleges to an acceptable standard by 1981, and provide also for the additional demands that can be expected on capital resources. Unfortunately, the States are not yet organised to handle a larger volume of planning and building construction but in the event that more construction can be handled, further finance may be considered as described in Recommendation (30), Paragraph IX. The Committee would hope that organisation will be corrected by the beginning of 1975 and, on this assumption, it is of the view that the proposed Commission should consider a capital expenditure program of the order of $300 million for the 1976-78 triennium for appropriate Australian Government support.

4.191 The Committee’s visits to technical colleges have led it to the conclusion that every effort has to be made as soon as practicable to bring equipment and workshop conditions up to date.

4.192 The Committee recommends that:

(22) An Australian Government grant of $50.266 million should be made available to the States for the purposes of capital expenditure of which $15.087 million should be devoted to expenditure solely on equipment and minor works other than as part of new building projects.
4.193 **Equipment and Minor Works.** In the Committee's view a most urgent need is for capital expenditure on equipment and minor works, excluding new equipment which should appropriately be regarded as part of the cost of new constructions. To underline its view it considers that the Minister should make it clear that none of the $15.087 million will be transferable to other capital projects and that every effort should be made to spend this component on equipment and minor works by December 1975.

4.194 In the main, equipment in the workshops is satisfactory. The Committee is concerned to ensure, however, that outdated equipment is speedily replaced. It was concerned to note in its discussions with technical college people in some States that, in the words of college staff in two States, some teachers and instructors saw themselves as scroungers from waste heaps and neighbouring industrial and commercial undertakings. In recommending the $15.087 million expenditure for equipment and minor works, the Committee intends that TAFE authorities should make every effort to remedy the conditions that cause technical college staff to give voice to such feelings.

4.195 The opportunity exists, in addition to the replacement of equipment, for minor works to include the general improvement of fittings, fixtures and facilities. This should lead to more modern toilets and ablution facilities, better ventilation, improvements to existing staff common rooms, repairs to structurally unsafe floors, the correction of inadequate fire escape stairs, remedies to poor illumination, provision of machine guards where they are required, better housekeeping by providing storage spaces away from the passage ways, the provision of dust extractors, the provision of fire fighting equipment and such other works as will improve the functioning of physical college conditions and concern for human welfare. In one way or another the specific deficiencies to which reference has been made are to be found in one State or another.

4.196 The Committee recommends that:

(23) *The $15.087 million referred to in Recommendation (22) should be distributed among the States for expenditure on equipment and minor works as follows:*

*Table 4.8: Recommended Distribution of Capital Grant for Equipment and Minor Works, 1 July 1974 to 31 December 1975.*

<table>
<thead>
<tr>
<th>State</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>4.758</td>
</tr>
<tr>
<td>Vic</td>
<td>4.000</td>
</tr>
<tr>
<td>Q'ld</td>
<td>1.800</td>
</tr>
<tr>
<td>SA</td>
<td>1.767</td>
</tr>
<tr>
<td>WA</td>
<td>1.702</td>
</tr>
<tr>
<td>Tas</td>
<td>1.060</td>
</tr>
<tr>
<td>All States</td>
<td>15.087</td>
</tr>
</tbody>
</table>

4.197 Approvals for the actual expenditure of funds should be in accordance with Recommendation 30, Paragraphs XXI to XXVII. Excluded from this grant is provision for the initial costs of equipment in new buildings.
4.198 The Committee was informed of an apparently anomalous situation arising from the provisions of Section 78 (1) (a) of the Income Tax Assessment Act. Inter alia, this Section provides the gifts to colleges of advanced education for the purchase of capital equipment are allowable deductions for taxation purposes.

4.199 The Committee is of the view that there should be no distinction between different categories of colleges because this can detract unnecessarily from the status of some. The Committee therefore recommends that:

(24) Gifts to TAFE type institutions for the provision of capital equipment should be recognised for taxation purposes identically with gifts for similar purposes to colleges of advanced education.

4.200 Land and Buildings. The Committee recommends that:

(25) The Australian Government should make the remaining $35.179 million out of the $50.266 million referred to in Recommendation (22) available to the States for capital expenditure on land and buildings in the following manner:

Table 4.9: Recommended Distribution of Capital Grant for Land and Buildings, 1 July 1974 to 31 December 1975.

<table>
<thead>
<tr>
<th>State</th>
<th>$ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>13.170</td>
</tr>
<tr>
<td>Vic</td>
<td>9.938</td>
</tr>
<tr>
<td>Q'ld</td>
<td>4.800</td>
</tr>
<tr>
<td>SA</td>
<td>3.313</td>
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<td>WA</td>
<td>2.900</td>
</tr>
<tr>
<td>Tas</td>
<td>1.058</td>
</tr>
<tr>
<td>All States</td>
<td>35.179</td>
</tr>
</tbody>
</table>

These sums should represent the value of projects for land and buildings which may be undertaken during the 18 months' period. The actual cash demand for this purpose should be determined in the light of progress made.

4.201 Planning and Designing. The efficiency of a capital expenditure program depends on good planning and, in turn, on adequate staffing. The States are generally deficient in staff resources to undertake the desirable level of planning necessary for a forward looking program of relatively large dimension for TAFE.

4.202 The Committee is of the view that a planning organisation within each TAFE authority should be so staffed as to ensure the collection and compilation of on-going statistical information about students, enrolments, etc., and of current and projected information from other planning authorities, particularly that relating to population, industrial and labour market trends. It should also prepare educational specifications and briefs for architectural design. This planning unit should have responsibility for overall co-ordination of capital expenditure planning and control within TAFE, and should include sufficient specialists to be effective. Each State should plan for its own needs but it is important that recruitment of professional staff and involvement of the colleges themselves, including consultation with subject teachers, students and administrators, be on a scale that will provide for the forward planning envisaged in 4.173. In this way repetition of design weaknesses observed by the Committee should be avoided.
4.203 In the general purpose grants recommended for recurrent expenditure there is provision for sums of approximately $200,000 to be earmarked individually in New South Wales and in Victoria, $100,000 individually in Queensland, in South Australia, and in Western Australia, and $70,000 in Tasmania, towards costs associated with a planning unit.

4.204 The expansion of capital works programs will increase the work demands on the designers and the construction agencies, generally the State Public Works Departments. The Committee considers that in a number of States more flexible means will need to be adopted to get the work done. The employment of consultants, for example, on a larger scale than before will be desirable for some time ahead.

4.205 The Committee considers that recommendations for the approval by the Minister of building proposals should be for specific projects. The proposed Australian Commission on Technical and Further Education should be prepared to consider proposals in any sequence and should co-operate with the States in building up a bank of master plans which can be sent for detailed design as funds become available.

4.206 Staffing resources should enable forward planning and master planning to operate effectively by January 1975. It should then be possible for master plans of individual building proposals to be presented to the proposed Commission for consideration for the 1976-78 triennium. The proposed Commission should require a statement and master plan for each proposal containing (a) the nature of the need for the project in terms of courses to be conducted, (b) design of site layouts in full showing the position, extent and purpose of each building — whether proposed or existing — and the extent of services to the site, (c) estimates of cost and their basis, and (d) planned time schedules.

4.207 Each proposal should be looked at in broad principle. The proposed Commission should not be concerned with detail once it is satisfied that the project will be planned in accordance with the following guidelines:

(a) provision of student territory, teacher facilities and office space, libraries, first aid, food services, and audio-visual arrangements;
(b) adequate provision for comfortable atmospheric conditions in buildings and special treatment of heat, dust and pollutant sources;
(c) acoustic treatments in classrooms and workshops appropriate to the subjects for which they are intended;
(d) recognition of traffic flow, both vehicular and pedestrian, and provision for access of handicapped non pedestrians;
(c) staged development and changeover arrangements for all complexes, whether wholly or partly new proposals;
(f) avoidance of disfigurement or demolition of buildings of historic or architectural merit;
(g) landscaping to provide a visual expression of the dignity and status of the complex;
(h) avoidance of over development of sites beyond reasonable capacity;
(i) location of new sites with proper regard to availability of public transport.

4.208 In order to facilitate the preparation of master plans, including site layouts, TAFE authorities should have available in a separate account funds to engage outside consultants as necessary. Therefore, additional to the funds for a planning unit referred to in 4.202, the Committee recommends that:
1½ per cent of the total grant to each State for capital expenditure on land and buildings should be available as soon as practicable to the State for use specifically by TAFE authorities for master planning purposes.

4.209 Funds for detailed design of individual projects with which the proposed Commission has agreed in the context of 4.207 should be available to States to enable them to build up banks of capital works projects completed to the pre contract stage which can be sent to tender at short notice.

4.210 The Committee recommends that:

10 per cent of the total capital grant to each State for land and buildings should be earmarked specifically for architectural project design to the pre contract stage and made available progressively as soon as master plans are agreed with the proposed Commission on Technical and Further Education.

4.211 The Committee further recommends that:

The proposed Australian Commission on Technical and Further Education should be satisfied with the provisions incorporated in the detailed design before recommending a specific building project to the Minister for the allocation of funds.

Student Residentials

4.212 The Australian Apprenticeship Advisory Committee submitted to the Committee an urgent requirement for hostel accommodation to facilitate block release training for apprentices. Reference has been made to block release earlier in this Report, the Committee holding the view that the concept is applicable to para professionals and students in other streams of TAFE in addition to apprentices. Country students studying externally should have the opportunity to attend colleges full time at intervals, if they wish, and stay at reasonably priced college accommodation. Moreover, as the trend grows towards a full time attendance option at technical colleges, full time students in country areas should be able to take advantage of available accommodation after the needs of block release students have been met. (After this Section of the Report had been completed the Committee received a late Submission from the Queensland Department of Industrial Affairs which could not be included in the summary of Submissions in Appendix C. Nevertheless, the Committee was so impressed by the case presented by this Queensland Department that it envisages that the proposed Commission allocate up to $1 million of the recommended capital expenditure grant of $4 million available for student residentials to the Queensland TAFE authorities, provided that its proposals are consistent with 4.213.)

4.213 The Committee considers that the concept of building hostels containing bedrooms without private facilities is outmoded and limits other uses to which such accommodation could be put in changed circumstances. Student residentials should comprise clusters of room units with individual facilities or with very limited sharing of facilities. Where separate sites are chosen for student residentials, they should be close to study services such as libraries and recreational facilities and when this is not possible these study services and recreational facilities should be built into the residentials themselves. The provision of hostels as sleeping quarters only is not an acceptable concept to the Committee. To the extent possible the need for student residentials should be assessed when sites for new colleges are being considered.
4.214 As a first step in the development of student residentials the Committee recommends that:

(29) The Australian Government should make the sum of $4 million available for the provision of student residentials and that TAFE authorities in the States be invited to submit proposals for construction projects.
PROPOSED CAPITAL EXPENDITURE PROGRAMS

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible matched sums, say</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>Land and buildings</td>
<td>$35,179,000</td>
</tr>
<tr>
<td>Equipment and minor works</td>
<td>$15,087,000</td>
</tr>
<tr>
<td>Residentials</td>
<td>$4,000,000</td>
</tr>
</tbody>
</table>

Total capital $60,266,000

PROPOSED RECURRENT EXPENDITURE GRANTS

**General Purpose Grants**

- Outright grants: $9,810,000
- Additional drawing rights: $9,810,000

Total general purpose: $19,620,000

**Specific Purpose Grants**

- Towards unrestricted access: $1,000,000
- In-service education: $2,400,000
- Community colleges: $56,000
- Planning library resource centres: $200,000
- Improvement of existing library buildings: $560,000
- Training of library technicians: $150,000
- Feasibility studies for the establishment of bibliographic centres: $95,000
- Research into external studies methods: $100,000
- Research grants: $300,000
- Training TAFE teachers as research workers: $150,000
- Fees reimbursement: $20,000,000

Total specific purpose: $25,011,000

Total recurrent: $44,631,000

Total capital and recurrent: $104,897,000

These grants are summarised in Figure 4.2.

PROPOSED DISTRIBUTION OF CAPITAL AND RECURRENT EXPENDITURE GRANTS AMONG STATES

**New South Wales**

- Recurrent expenditure
  - general purpose: $6,900,000
  - specific purpose: $1,545,000
- Capital expenditure
  - land and buildings: $13,170,000
  - equipment and minor works: $4,758,000

Total: $26,373,000

**Victoria**

- Recurrent expenditure
  - general purpose: $5,360,000
  - specific purpose: $860,000
- Capital expenditure
  - land and buildings: $9,938,000
  - equipment and minor works: $4,000,000

Total: $20,158,000
Queensland
Recurrent expenditure  general purpose  3,240,000
  specific purpose  620,000
Capital expenditure  land and buildings  4,800,000
  equipment and minor works  1,800,000

South Australia
Recurrent expenditure  general purpose  1,780,000
  specific purpose  535,000
Capital expenditure  land and buildings  3,313,000
  equipment and minor works  1,767,000

Western Australia
Recurrent expenditure  general purpose  1,560,000
  specific purpose  475,000
Capital expenditure  land and buildings  2,900,000
  equipment and minor works  1,702,000

Tasmania
Recurrent expenditure  general purpose  780,000
  specific purpose  170,000
Capital expenditure  land and buildings  1,058,000
  equipment and minor works  1,060,000

These grants are summarised in Figure 4.3.

<table>
<thead>
<tr>
<th>PROPOSED UNALLOCATED GRANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Grants</strong></td>
</tr>
<tr>
<td>Residencies</td>
</tr>
<tr>
<td>Possible matched sums, say</td>
</tr>
<tr>
<td><strong>Total capital</strong></td>
</tr>
<tr>
<td><strong>Recurrent Grants</strong></td>
</tr>
<tr>
<td>Community Colleges</td>
</tr>
<tr>
<td>Planning library resource centres</td>
</tr>
<tr>
<td>Money for research purposes</td>
</tr>
<tr>
<td>Fees reimbursement</td>
</tr>
<tr>
<td><strong>Total recurrent</strong></td>
</tr>
<tr>
<td><strong>Total capital and recurrent</strong></td>
</tr>
</tbody>
</table>

NOTE: Specific amounts set aside for in-service training for non teaching staff, and for staff for planning units, have not been identified separately. These amounts are incorporated in the general purpose recurrent expenditure grants.

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Figure 4.2: Recommended Recurrent Expenditure Grants in the States (1 July 1974 to 31 December 1975).

GENERAL PURPOSE SUM AND EARMARKED AMOUNTS

<table>
<thead>
<tr>
<th>NSW</th>
<th>$6.90M</th>
<th>VIC</th>
<th>$5.36M</th>
<th>QLD</th>
<th>$3.24M</th>
<th>SA</th>
<th>$1.78M</th>
<th>WA</th>
<th>$1.56M</th>
<th>TAS</th>
<th>$0.78M</th>
<th>AUST</th>
<th>$19.62M</th>
</tr>
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</table>

For use at the discretion of TAFE authorities but includes ancillary staff in Colleges and libraries, general research, consumable materials for workshops and laboratories, TAFE advisory services to industry.

Earmarked amounts or percentages are subject to variations within their total by agreement between the proposed Commission and the States concerned.

SPECIFIC PURPOSE SUMS

(Includes sums allocated among the States and unallocated sums)

<table>
<thead>
<tr>
<th>$2.400M</th>
<th>$1.005M</th>
<th>$1.000M</th>
<th>$0.550M</th>
<th>$0.056M</th>
</tr>
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</table>

In-service teacher education
Libraries - additional to the $1.96M earmarked from general purpose recurrent expenditure grant
Towards unrestricted access
Research
Community college proposals only

$20.000M: Technical training fees reimbursement

Specific purpose sums are available only for the purposes and up to the amounts nominated.

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RECOMMENDED CAPITAL EXPENDITURE GRANTS
(1 JULY 1974 TO 31 DECEMBER 1975)
($millions)

Allocated Grants

State | Land, Buildings, Equipment, etc.
-----|----------------------------------
Tas.  | 2.118
West. Aust. | 4.602
South Aust. | 5.080
Q'ld. | 6.600
Vic.  | 13.938
N.S.W. | 17.928
Total | 50.266

Key

- Land, buildings, and design
- Equipment and minor works
- Residential (unallocated)
- Possible matched sums (unallocated)

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<td>$35.179m</td>
<td>1.058</td>
<td>2.900</td>
<td>3.313</td>
<td>4.800</td>
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<td></td>
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<tr>
<td>$15.087m</td>
<td>1.060</td>
<td>1.702</td>
<td>1.767</td>
<td></td>
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<td>$4.000m</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>$6.000m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$60.266m</td>
<td><strong>$50.266m</strong></td>
<td><strong>$50.266m</strong></td>
<td><strong>$50.266m</strong></td>
<td><strong>$50.266m</strong></td>
<td><strong>$50.266m</strong></td>
<td><strong>$50.266m</strong></td>
</tr>
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Total allocated $50.266m
PRINCIPLES — ALL GRANTS

4.215 The Committee in the course of its deliberations drew up principles which it used in developing its recommendations concerning financial support by the Australian Government for technical and further education.

4.216 They are set out below and the Committee recommends that:

(30) The proposed Australian Commission on Technical and Further Education should adopt the following principles:

General

Reference to the 'Minister' means the Australian Minister for Education, except where otherwise indicated. Reference to the 'Commission' means the proposed Australian Commission on Technical and Further Education (ACOTAFE).

(I) The Commission should:

(i) invite proposals progressively for the development of technical and further education from appropriate authorities in the States and the Australian Territories;

(ii) from time to time, publicly invite the community, technical college teachers, industry, social services, and special purpose organisations to advance views to the Commission on any aspect within its terms of reference;

(iii) make continuing opportunities to visit appropriate colleges, institutions and facilities and to hold discussions with appropriate government and other authorities in the States and Australian Territories.

(II) Visits to institutions should be arranged with the co-operation of the appropriate authorities in the States and Australian Territories. The Australian Government should regard it as a direct responsibility of the Commission to make such visits and to hold such discussions as it considers necessary.

(III) Authorities and institutions recommended by the Commission for financial benefits should be those whose maintenance or administration are consistent with its terms of reference.

(IV) Recommendations as to the allocation of funds to the States for particular authorities, institutions and purposes concerned with technical and further education should be aimed primarily at meeting the educational needs of people as individuals in the different regions of Australia, within the context of employment opportunities in industry, commerce and government, and existing and future manpower requirements.

(V) To assist the Commission in furnishing information and advice to the Minister as to the amount and allocation of financial assistance in accordance with its terms of reference, each State should be asked to nominate its preferences on needs and on priorities. In submitting their separate proposals the States should be asked to state a case for their priorities.

(VI) (i) Except for the 18 months' period from July 1974 to December 1975, the financial needs of technical and further education should be reassessed each year for three years ahead.

(ii) In legislation for formal triennia a clause should be included to avoid interruption to cash flows to the States, especially when the Minister is confident that the payment of an amount to a State, after the period to
which the Act applies, will be used for the purpose of meeting commitments undertaken during the period of the Act.

(iii) States should be assured that once Australian Government finance has been made available for any project approved by the Minister that project will be financed to the extent of the Minister's approval.

(VII) As evidence of capacities in developing technical and further education relative to funds provided by the Australian Government, the States should be requested to report each December as to the actual distribution of the expenditure of these funds and in a form that will enable comparisons to be made of uses of the funds over periods of time.

(VIII) The Commission should be influenced in its recommendations as to total funds to be made available and funds to be made available for each State, by the States' demonstrated capacity to organise expenditure to the extent of funds allocated for a triennium.

(IX) The Commission should feel free, in the light of prevailing economic circumstances, to make recommendations concerning additional grants during a triennium to each State which demonstrates a capacity to organise expenditure beyond the funds allocated for that triennium.

(X) In addition to proposals from the States, the Commission should, at its discretion, initiate or consider proposals which it regards as necessary or desirable for the balanced development of technical and further education throughout Australia.

(XI) Types of courses which should be recommended to the Minister by the Commission for financial support should be those which are consistent with needs and priorities as determined by the Commission. Where financial support is recommended for types of courses similar to those in colleges of advanced education, the level of support should be comparable with that in colleges of advanced education but the Commission should consult regularly with the Australian Commission on Advanced Education to avoid duplication of funding, in whole or part.

(XII) All Australian Government finance should be channelled through the Commission, whatever the courses being funded, when TAFE authorities are responsible for the institutions concerned. ACOTAFE approval of proposed funding for TAFE courses in institutions which receive Australian Government finance through other Commissions should be obtained before the proposed funding becomes effective.

Capital Expenditure

Sites

(XIII) The Commission should consider proposals for the purchase of land for use for or by institutions of technical and further education. Recommendation for purchase of any site should carry no implication as to the priority to be accorded to any subsequent building proposed.

(XIV) In making recommendations concerning the development of new sites, and the redevelopment or extension of existing sites, the Commission should assure itself of the appropriateness of the site, and the nature of the proposed development, having regard to the technological, sociological and cultural needs of the area and of the needs of teachers and of students. In this regard, in addition to the educational needs of the students and community, the Commission should have regard to the adequacy of the intended provision for:
(i) staff facilities, student residentials;
(ii) library resource centres, provision for central halls, theatres, food services, etc.;
(iii) sporting and recreational facilities;
(iv) transport — access to public transport to and from work place or home, provision for parking;
and the timing of such provision in the development or redevelopment of the site.

Buildings

(XV) Recommendations for the approval by the Minister of building proposals should be for specific projects.

(XVI) (i) At the discretion of the Minister, on the advice of the Commission, approval should be available for expenditure on the designing to the pre-contract stage of a building or a collection of buildings whose master plan has been agreed with the State concerned.
(ii) No additional money from Australian Government sources should be available for use on such projects until appropriated by the Parliament.

(XVII) The Commission should consider proposals for student residentials in both city and non-urban areas on the basis that the Australian Government would provide the funds for both capital and recurrent expenditure. These should be funded, at the Minister’s discretion, in all other ways on the principles applied in respect of colleges of advanced education.

(XVIII) Legislation for the provision of funds by the Australian Government for technical and further education should provide the Minister with the power to approve, on the advice of the Commission, the transfer of capital funds between approved projects within a State, and between States, if the States concerned seek or agree to these transfers.

(XIX) The Australian Government should be prepared to consider, on the advice of the Commission, supplementary submissions for additional capital funds required because of cost escalation factors during the course of a triennium.

(XX) The Australian Government should be prepared to consider, on the advice of the Commission, supplementary submissions for additional capital funds required because of unforeseen changes in contracting and like circumstances.

Equipment

(XXI) The Commission should recommend grants, as appropriate, for the purchase of new or replacement equipment for technical and further education institutions, in both new and existing buildings.

(XXII) Moneys available resulting from recommendations of the Commission and moneys available from other sources of finance from the Australian Government should not be combined to purchase equipment even though such equipment may be suitable for multi-level education programs.

(XXIII) Equipment for a new building necessary to make it a ‘going concern’ should be regarded as capital expenditure irrespective of the value of the individual items, but not beyond the end of the triennium following the triennium in which the building was completed.

(XXIV) There should be separate approval from the Minister for any single item of equipment costing $20,000 or more, whether for a new or existing building (items
costing less than $20,000 should be treated in aggregate). The nature of equipment purchased should be at the discretion of the States, but should be justified in terms of relevance to the teaching/learning process.

(XXV) Funds made available as capital grants should not, under any circumstances, be applied to recurrent or maintenance expenditure.

Other Works and Services

(XXVI) Subject to what follows, States should be permitted to incur expenditure on projects costing less than $20,000 individually, within a total grant, after they receive advice that funds for the purpose have been appropriated by the Parliament for use by the Australian Government. Continued application of this principle should be reviewed in the light of annual statements for record purposes from the States, showing the distribution, by projects, of such expenditure approved by the State Minister or Ministers concerned.

(XXVII) All other moneys appropriated under this heading will be for specific projects approved by the Minister.

Recurrent Expenditure

(XXVIII) Legislation for the provision of funds by the Australian Government for technical and further education should provide the Minister with power to approve, on the advice of the Commission, the transfer of funds for recurrent expenditure between specific and approved programs in a State and between years within the triennium.

(XXIX) The Australian Government should be prepared to consider, on the advice of the Commission, supplementary submissions for additional funds for recurrent expenditure required because of cost escalation and other unforeseen circumstances, during the course of a triennium.

(XXX) On the advice of the Commission, special grants to the States should be considered on the basis of need for the purchase of library books and library material for approved institutions.

(XXXI) Library funds provided by the Australian Government should not be available to purchase multiple copies of standard text books.

(XXXII) On the advice of the Commission, funds should be considered for co-ordinated programs of research into technical and further education.

(XXXIII) The Minister, on the advice of the Commission, should consider making funds available for hiring equipment, including the use of computers.
# 5: STRUCTURE OF THE PROPOSED COMMISSION

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STATUS AND ORGANISATION

5.1 The constitutional responsibility for technical and further education in the States rests with the State Governments and so also does the financial commitment. The Committee considers that action to centralise further the control of TAFE would be unrealistic and should be avoided. The structure of the Commission should facilitate consultation with and among the States so as to bring about commonality in the conceptual and philosophic frameworks within which TAFE is developing.

5.2 The Committee's Conclusions and Recommendations emphasise its considered view that the systems of technical and further education in Australia have grown up without any consciously adopted philosophy that brings together two complementary areas — education and vocational preparation.

5.3 The proposed Australian Commission on Technical and Further Education could have a conscious philosophy adopted along the lines set out in this Report. To influence the situation, however, and to continue the Committee's work, the proposed Commission will need a status equal to that of the other Commissions concerned with post school education. Unless this status is achieved, the Committee believes that the Commission will not be in a position to change the 'Cinderella' image ascribed to technical and further education by the Australian Minister for Education.

5.4 The new Commission will need a structure that will enable it to pursue the concepts of recurrent education, of unrestricted access to TAFE for all sectors of the community and of others that have been discussed in earlier Chapters. The structure will need to be staffed by senior personnel with an understanding of industry, the labour force, vocational and adult education, and industrial training. Not many such people are likely to be employed at present in the Australian Public Service and therefore the Committee considers that the Commission should from the outset be given authority to advertise all its positions, both inside and outside the Service, with a view to recruiting the best available people.

COMMISSION STRUCTURE

Standing Committees

5.5 The Committee considers that the Commission would work best through Standing Committees. The Commission should contain five Standing Committees as follows:

(1) Finance
(2) Research and Libraries
(3) Statistics and Occupational Trends
(4) Course Development
(5) Buildings and Equipment.

5.6 Their respective functions should be:

Finance
(a) Prepare annual estimates of requirements relating to capital and recurrent needs in the States, including grants for reimbursement of fees.
(b) Draft annually financial recommendations for three years ahead based on annual revisions of needs and statistics received from the States.

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(c) Consider financial implications of other Standing Committees and prepare briefs for ACOTAFE on financial co-ordination.

Research and Libraries
(a) Arrange for grants or payments for research projects approved or initiated by ACOTAFE in accordance with its principles.
(b) Meet with the State TAFE authorities at intervals and prepare progress reports on research and development.
(c) Maintain liaison with the proposed Australian TAFE Technology Centre and prepare briefs for ACOTAFE on any necessary constructive action.
(d) Arrange for production, including editing, of the TAFE journal and other publications.
(e) Consider capital and recurrent expenditure projects and proposals for the development of library resource centres in colleges and of effective library systems.

Statistics and Occupational Trends
(a) Consult with State and other appropriate education bodies to arrive at agreed definitions and methods for collection of data.
(b) Collaborate with the Australian Bureau of Statistics to develop appropriate methods of data collection from TAFE institutions.
(c) Provide help with resources as necessary to State or other institutions to collect required data.
(d) Arrange programming and computing facilities to validate and analyse data.
(e) Prepare as often as is deemed necessary statements for publication on occupational trends and their implications for TAFE.

Course Development
(a) Arrange meetings at frequent and regular intervals with the States to draw up a list of equivalent course qualifications and publish results at six-monthly intervals.
(b) Publish accounts of progress by the States in reviewing and adapting existing courses to achieve more relevance of content to practice, and the procedures employed.
(c) Publicise developments in new attendance options for students.
(d) Arrange quarterly meetings with the States on the development of Central Resource Centres, implications of research for course content and structure, external studies and the removal of barriers to access to technical and further education, and other relevant matters.
(e) Prepare for publication briefs on extensions of recurrent education in TAFE.
(f) Report progress in lifting the level of community awareness of TAFE.
(g) Prepare briefs on State proposals for community colleges.
(h) Prepare briefs on developments in counselling and social work in technical college type institutions.
(i) Prepare briefs relating to adult education.

Buildings and Equipment
(a) Assess all master planning proposals, including capital equipment requirements.
(b) Ensure that ACOTAFE principles are embodied in basic sketch designs.
(c) Arrange periodical reports of progress of capital works and services being financed from Australian Government grants including actual expenditure performance.

(d) Assess the timing of ACOTAFE recommendations to the Minister for approval of projects for financing.

(e) Initiate research into standards for classrooms, workshops, laboratories and other accommodation and into development costs.

This Standing Committee should arrange to maintain liaison with the States through part time liaison officers nominated by the State Council of Technical Education or its equivalent, and paid for by the Australian Government. These liaison officers should be available at short notice to assist the States to ensure that their master plans for design and redevelopment are consistent with ACOTAFE principles, and that agreement by ACOTAFE to recommend Ministerial approval will not be delayed. In States without Councils of Technical Education, the Standing Committee should make arrangements for its secretariat to prepare briefs on proposals for submission to the next regular meeting of ACOTAFE.

STAFFING

5.7 The basic form of the organisation of the Commission should consist of a full time Chairman, a full time Deputy Chairman, a Senior Assistant Secretary in the Second Division, and senior staff with a minimum of junior staff. Small organisations are better served by multi purpose staff who can stand in for one another and thus provide greater organisational flexibility than a long hierarchical chain.

5.8 The staff should serve as secretariat for each Standing Committee as well as prepare policy and conceptual briefs, perform the statistical work, and provide an advisory service to the States on subjects indicated in several Chapters of the Report. Officers should be at the Principal Executive Officer and Executive Officer level, the former forming one pool with common duties and the latter another pool with common duties. The only other staff that should be necessary for the Commission are typists, clerical assistants and perhaps one administrative assistant. The Commission should avoid middle level staff which are unlikely to be able to contribute to the principal work. In the Committee's view it is a fallacious form of economy to provide support staff for senior officers for whom mastery of the detail is essential to the implementation of the policy which they are developing.

5.9 The Committee recommends that:

(31) The structure of the proposed Australian Commission on Technical and Further Education should provide for five standing committees as follows: finance, research and libraries, statistics and occupational trends, course development, and buildings and equipment.
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