
The Cinderella image

1944 1973

Political and economic changes and social attitudes

After the conclusion of World War II in 1945, the Labour Party continued its policy of promoting the rural sector. It also initiated a policy of decentralisation. As did other States, Queensland experienced a shortage of skilled labour up to 1952. Following a brief recession in 1952 triggered by a slump in wool prices, the economy expanded once more, though impeded by a shortage of skilled labour.

In 1957 the Labour Government was replaced by a Country-Liberal Party Coalition Government, which continued the rural development policies of the Labour Government. The rural population, however, continued to decline. The new Government also encouraged the investment of private capital in industrialisation, especially that associated with the extraction of minerals. It also attached greater importance to the education portfolio.¹

The State recovered quickly from a brief recession in the early 1960s to experience rapid industrial development. The range and scale of manufacturing greatly increased so that about one-half of the net value of the State's production came from secondary industries. From 1960 to 1964, Queensland's annual rate of increase in production was 7.3 per cent. In the following five years, 1965-1969, this rate rose to 11.7 per cent. Intensive use of land in agricultural areas led to the development of a highly mechanised rural sector. While production associated with the processing of primary industries remained important, the proportion of production from other secondary industries increased considerably, particularly in the field of metal products. The tourist industry also became a significant industry.

The number directly employed in manufacturing during the 1960s and early 1970s expanded considerably, while substantial growth was also recorded in commercial, financial, professional and personal services. By 1972, 19 per cent of the labour force was employed in manufacture, 17 per cent in primary production, 17 per cent in commerce, and 17 per cent in transport and communications. The balance was made up of building and construction, public authority and defence, and the various services. Females comprised

about 33 per cent of the total civilian wage and salary earners.²

Immigration continued to supply some of the demand for skilled labour, though, during the period 1947 to 1961, Queensland received only 6.1 per cent of the total Australian intake. During Queensland parliamentary debates in 1964 on apprenticeship legislation, several parliamentarians expressed concern about this immigration trend. They claimed that men were being sent overseas to recruit tradesmen, and that the State should train its own and not import them. One of the parliamentarians, Jack Duggan, stated that in the previous year only 54 per cent of employers in Australia employed their full quota of apprentices.³

In 1957 the success of USSR in sending the first spaceship into orbit had a strong impact on other highly industrialised nations, which believed that they were lagging behind Soviet scientific and technological development. The Director of Technical Education in Queensland at that time, Clive Evans, stated that Australia was facing a crisis because it lagged behind other countries in the proportion of technically trained men and women it produced. He also observed that effective defence depended on science and technology.⁴

During the following years until his retirement in 1963, Evans stressed how important technology was to the greatly accelerated industrial development taking place. He pointed out that industry demanded good managers, technologists, technicians, and tradesmen in greater numbers than at any previous period. He believed that more highly skilled men and women were needed to control and direct the new means of production and to reduce production costs in Queensland secondary industries to make them more competitive. He stated that the need for unskilled manual labour had dropped considerably. Evans also pointed out that a greater number of parents recognised the increasing opportunities offered by education, and so more students were pursuing studies beyond the compulsory leaving age.⁵

However, Queensland society still retained a strong element of snobbery towards blue-collar workers. References were made to this snobbery in Parliament. In 1959 Vince Gair said that parents had 'a fallacious idea that their Johnny would not look as well in overalls as he would in a doctor's coat'. In 1964 Jack Duggan

complained that the community regarded white-collar workers as more worthy than tradesmen .⁶

Administration

Head Office

As a result of a reorganisation of the Department, superintendents of technical, primary and secondary education were appointed on 1 January 1944. These superintendents had equal salary ranges and were subordinate to the Director-General of Education, a position that replaced that of Director of Education in 1941. The Superintendent of Technical Education appointed was Clive Evans, M.Sc. John Hill, who had previously administered technical education as Assistant Chief Inspector, became Superintendent of Secondary Education, and the position of assistant chief inspector was discontinued. The title superintendent was replaced by that of director in 1948.

Evans graduated from the University of Queensland in 1917. He enlisted to fight in World War I and gained a commission as a flying officer. He returned from overseas in 1919, and was appointed as a teacher at Rockhampton State High School. This was followed by appointments as Acting Principal of Rockhampton Technical College and High School in 1923, Headmaster of the Ipswich Technical High School in 1924, and Principal of Ipswich Technical College in 1933⁷, from which position he became Superintendent of Technical Education.

In 1955 G. Black was appointed Inspector of Secondary Schools and Technical Colleges, and inspection of

technical colleges by district inspectors was discontinued. In 1958 Black was replaced by two inspectors, F.T. Milne, and C.R. Roberts. The number of these inspectors subsequently increased and inspectors of secondary schools and technical colleges continued to operate until the end of 1965. These inspectors tended to spend most of their inspection time in the high schools.⁸ In 1966 they were replaced by inspectors of secondary schools and a separate inspector of technical colleges, Roy Wallace, who was replaced by Arthur Mackenzie in 1972.

At the end of the 1940s, a separate Inspector of Manual Training, Joe McCracken, was appointed to inspect manual training in primary and secondary schools. At the end of the 1960s, the responsibility of inspection of manual training and domestic science passed from the Technical Education Branch to the Secondary Branch.

When Evans retired at the end of 1963, he was replaced by Clyde Gilmour, who became Director of Technical Education on 1 January 1964. Clyde Gilmour was indentured as an apprentice mechanical fitter in 1940 with the Brisbane City Council Tramways and Power House, and at the same time studied towards a Diploma in Mechanical and Electrical Engineering at CTC. Following service with the RAAF, 1943-46, he completed his apprenticeship and received his diploma in 1948. Further studies led to a B.Sc. in 1952 and a B.E. with honours in mechanical engineering in 1959. He taught engineering subjects at CTC from 1952 to 1958 and lectured at the University of Queensland from 1959 to January 1963, when he became the Principal of CTC. Following a tour of technical education institutions in Europe and North America in 1963, he was appointed



Clive Evans, Director of Technical Education, 1944-1963.



Clyde Gilmour, Director of Technical Education, 1964-1972.

Director of Technical Education.⁹ In this position he quickly won respect and support from his subordinate officers.¹⁰

The Minister for Education, Jack Pizzey, made it clear to Gilmour that he had a free hand to develop technical education, making whatever changes were necessary. At the first capital works meeting in 1964 in Pizzey's office, Gilmour put forward an ambitious program to renovate and replace run-down and out-of-date buildings. Pizzey stunned the primary and secondary directors by stating that there was to be a major thrust in technical education and that the vote for technical education would be accepted in its entirety.¹¹

Gilmour began with a very small Head Office staff - Walter Gillis who was assistant to the director, a chief clerk and two office staff. Up to that point, much of the administrative decision making of the branch was based on the recommendations of the principal and senior officers of CTC, who were also responsible for setting and marking the State technical college examinations. These practices were phased out as the Head Office staff grew, as indeed they had to be phased out in light of the planned demise of CTC. At the same time,¹² Gilmour gave more responsibilities to the other colleges.

Gilmour played an important part in steering through the changes in technical education leading to the establishment of autonomous institutes of technology. Nearly all of the Technical Education Advisory Council's recommendations to the Minister on technical education matters were passed down from the Minister through the Director-General to Gilmour for his advice.¹³

One of the problems faced by Gilmour, and earlier directors of technical education, was that the Departmental officers to whom they were responsible had come

through the primary and secondary school systems and often lacked an understanding of the system of technical education and its special needs.¹⁴ Another related problem was the constant friction between primary and secondary administrators on the one hand and technical administrators on the other.¹⁵

When Gilmour was appointed Deputy Director-General of Education on 16 February 1972, Roy Wallace took his place as Director of Technical Education. Wallace began apprenticeship studies in 1943, after which he obtained a Diploma in Mechanical and Electrical Engineering and a postgraduate Diploma in Electrical Engineering, and was then admitted as a Member of the Institution of Engineers, Australia. After some years as an electrical engineer, Wallace began as a lecturer in engineering at CTC in 1959, and made a quick ascent of the promotional ladder. Within four years he had become a Deputy Principal at CTC, and from 1964 to 1971 served as Inspector of Technical Colleges. In 1971 he became a staff inspector and in the same year was Acting Director of Technical Education.¹⁶

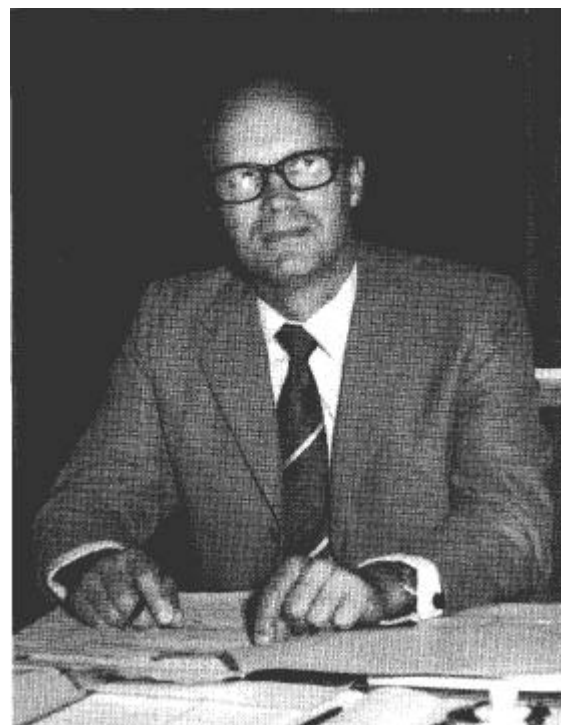
College administration

In the combined high school and technical college, the principal's position was usually part of the promotional avenue for secondary principals. Such principals were quite content to leave the day-to-day administration and control of the technical college section in the hands of the senior technical teachers, who did not receive an official appointment and were not paid extra for their administrative responsibilities.¹⁷

Officers occupying positions of responsibility in technical colleges during the 1940s and 1950s often experienced difficulties in securing equipment and



Jack Pizzey, Minister for Education, 1957-1968.



Roy Wallace, Director of Technical Education (TAFE), 1972-1986; Director-General, DEVET, 1987-1988; Managing Director, BEVFET, 1989-1991.

material for their courses. 'Scrounging' for them was a common practice. Some resourceful college administrators provided college services and resources for local industries in return for equipment and material 'through the back door'. An accompanying benefit from such a strategy was that a strong liaison developed between technical colleges and local industries. These services were provided discreetly because such commercial enterprise, including the college use of apprenticeship labour, was officially not approved until 1987, when 'fees for service' became an official policy.¹⁸

Staff - efforts to upgrade

Unfortunately, the Technical Education Branch had great difficulty in providing adequate staffing for colleges during the late 1940s and the 1950s because of the general shortage of skilled labour. This shortage was one of the results of the low birth rates during the depression years of the 1930s. When the institutes of technology were established in 1965 and 1967, Gilmour had difficulty in staffing these because the existing salary structure was inadequate for institutions now regarded as tertiary institutions. This problem was settled when, after the 1969 Commonwealth Sweeney Report, institute lecturers received salaries equal to those of university lecturers where equal qualifications were held.¹⁹

Working conditions for technical education staff at some locations were very poor. The Technical Correspondence School is an especially striking example. From 1949 to 1963, it was housed 'temporarily' in the Trocadero, which had previously been a dance hall. Some of the teachers in this building worked in an area where there was no ceiling, and pigeons used to perch overhead on the rafters. One day, pigeon droppings landed directly on a student's drawing in front of one of the teachers, who cynically quipped, 'What a critic'. Whether it was a commentary on the student's work or the working conditions was not recorded.²⁰ In 1963 the correspondence school shifted to a nearby building in Grey Street, which quickly became known to its inmates as 'Cockroach Castle'.²¹

The Motor Mechanics Section of CTC, when it was conducted in the old dilapidated South Brisbane Boys' Primary School, was another location where conditions were poor. Holes drilled in the floor to drain water deposited during the 1890s flood were still visible. The building was infested with bird lice, and mice would sometimes distract the attention of students attending night classes.²²

By 1962 commercial and domestic science teachers required a pass in the Senior Public Examination before proceeding to a two-year training course, and manual training teachers for primary and secondary schools required a pass in the junior Public Examination, in addition to trade qualifications and experience, before their three-month training course.²³ Technical teachers bound for colleges still did not receive any teacher training.

The inadequate professional training received by

manual training and technical teachers continued to be a source of increasing dissatisfaction. For newly appointed technical teachers, a common introduction to teaching was a class roll thrust into their hands, a gesture in the direction of their class and an instruction to begin teaching.²⁴ This lack of teacher training condemned them to a lower status and a lower salary structure than that of primary and secondary teachers. In 1957 the Principal of CTC, McGrath, wrote a report to the Director, Evans, expressing concern about the lack of professional status of technical teachers.²⁵

Many technical teachers and manual training teachers resented the attitudes of some officers in other branches, who regarded them as inferior teachers with insignificant qualifications teaching inferior students. Technical teachers in a combined high school and technical college felt that the technical college section came a definite second to the secondary section. Manual training teachers in primary and secondary schools resented those principals who tried to coerce them into being general maintenance men.²⁶

In 1959 a manual training teachers' deputation approached the Minister, Pizzey, requesting a scheme for raising the standard of entry and training of manual training teachers. This deputation was unsuccessful.²⁷ In 1962 Jack Houston raised the issue in Parliament, condemning the Government for its neglect of the issue.²⁸ While the Technical Education Branch was not able to cater adequately for this need immediately, it did introduce, in 1962, a technical teachers' training course of two years' duration through the Technical Correspondence School. Edgar Hiley, Inspector of Manual Training, was the tutor. This course was not compulsory and had a high drop-out rate.²⁹ In 1965 the branch provided a two-week, full-time course, using lecturers from the teachers' college.³⁰

In March 1972, a day release course for technical teachers was introduced at Mount Gravatt Teachers' College. This required attendance one day per week, later two days per week, for two years. A certificate in teaching was awarded on the successful completion of the course.³¹

Branch policy, throughout the period, favoured continuing the employment of experts from commerce and industry as part-time teachers to ensure that a real relationship was maintained between teaching and industry.³²

Technical teachers who taught in country schools found that they generally became well integrated into the community. Furthermore, close relationships developed between the teaching staff and local industries.³³

Provision of technical education

Holding the fort, 1944-1963

The strong demand for a more highly skilled work force led Evans in the late 1950s to urge increased expenditure on technical education to adjust courses to meet the needs of the rapid changes in technology. He stated that they could not 'maintain a jet aeroplane age on a coach-horse

economy and technical education system'. He also stressed that it was important for technical education to train as many technologists and technicians as possible and that the State should even make the maximum use of the services of those technologists and technicians unable to complete courses.³⁴

In 1961 the Director-General of Education, Herbert G. Watkin, probably mirroring the attitudes of the Technical Education Branch, stated that the technical colleges needed to provide a general education in addition to technical skills.³⁵

Unfortunately, technical colleges were ill-equipped to cope with these new postwar demands. Machinery, used for three shifts a day during the war years, was rundown. The buildings, often unsuitable for their purpose, were overcrowded. While the scaling down of the Commonwealth Reconstruction Training Scheme in 1949 provided temporary relief in accommodation for some colleges, overcrowding remained a problem into the 1960s.³⁶ Furthermore, the Department felt compelled to give higher financial priorities to other branches of education, especially secondary education during the late 1950s and early 1960s, when rapidly increasing enrolments imposed considerable pressure on Departmental resources.³⁷

This rapid growth in secondary enrolments led to the end of the marriage of convenience that existed in many centres between secondary education and technical education. The Department believed it was administratively expedient to separate them, and, in 1962, Toowoomba, Rockhampton and Mackay High Schools were established as institutions separate from the technical colleges. Subsequently, the remaining combined institutions were separated. The usual pattern was for the high schools to be established in modern buildings on a new site, leaving the technical college with the original site and the old buildings.³⁸

Meanwhile there were other developments. In 1945 the Brisbane Technical Correspondence School opened, replacing the correspondence classes conducted by CTC. The students targeted initially included serving and discharged members of the armed services. In the first year, thirty-eight correspondence courses were available in art, commerce, literature, mathematics,

rural studies, trades and domestic science. Total enrolment for the first year was 2369. The variety of courses available quickly increased. In 1947, for example, subjects for the qualifying examinations for Clerks of Petty Sessions and Stipendiary Magistrates were offered. By 1947, students were widespread, located not only in Queensland (including prisons), but also in other States, other Commonwealth countries, the United States and Japan. The Correspondence School also provided notes of their courses to technical teachers undertaking courses for the first time in colleges that lacked suitable support material.³⁹ The name of the school was subsequently changed to the Queensland Distance Education College.

In 1951 the Department took over Ipswich, the last of the non-government technical colleges, probably because it believed that it could run the college more economically. The Minister, George Devries, said at the final meeting of the committee that he hoped they would continue to take an interest, but, as elsewhere, they quickly lost interest in the affairs of the college.⁴⁰

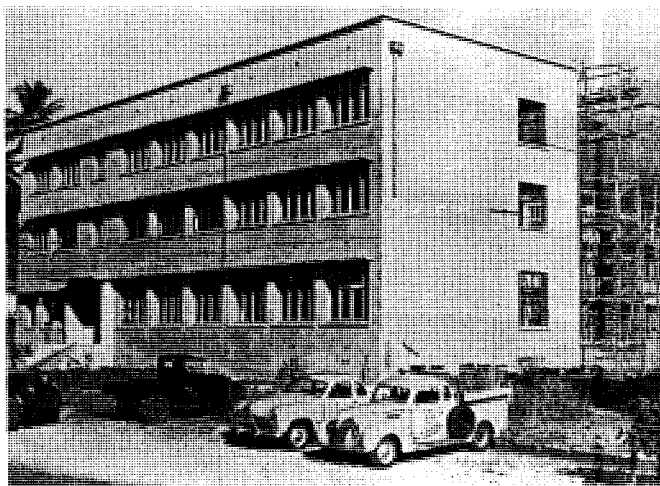
CTC, the largest educational institution in the State, continued its role as a model for other colleges, with most of the State technical college annual examinations set by CTC staff.⁴¹ In 1947 Industrial High School shifted to nearby Smellies Building, cut its ties with CTC completely, and became a separate high school. As part of a secondary school decentralisation scheme, this school closed at the end of 1961, followed, at the end of 1962, by Domestic Science High School and the high school section of the State Commercial High School and College, leaving open, in 1963, the State Commercial College.

Special office-training classes, which had been taken within the Commercial High School and College, were continued in 1963 at the State Commercial College within the Office Training School, with Ruth Don as officer-in-charge. The entry requirement was a pass in five junior Public Examination subjects. The course consisted of English, business methods, shorthand, typing, and everyday living and social skills. Graduates from the Office Training School quickly proved popular with employers, who would apply direct to the school for employees. On one occasion when a bank officer requested two girls, Don sent eight girls for the bank to make a choice. The bank officer later rang back to say that the bank was so impressed with the job applicants that it had taken all eight.⁴²

Most officers in the Technical Education Branch during the period 1944-1964 felt that technical education was sadly neglected, frequently referring to it as either 'the cinderella of education' or 'the orphan of the Department'. Most others working in the field of education in Queensland at that time also accepted those terms as an accurate description of technical education.⁴³

Relief and reorganisation, 1964-1973

Commonwealth assistance. Earlier, in 1959, the Director-General, Watkin, suggested that a report should be made on technical education similar to the 1957 Murray Report on universities, which had resulted in



Townsville Technical College, new training unit under construction, about 1951.

Commonwealth financial assistance to those institutions. Watkin stated that such a report should deal with the relations between technical colleges and universities to determine the best destination of students to these institutions. He said that it was possible that some students who chose universities might have best served the national interests by progressing up the technical education ladder. He cited precedents of Commonwealth assistance to technical education, and claimed that it was needed once more to improve the provision of technical education, to cater for the large number of young people seeking tertiary education, and to produce the trained personnel needed to increase national production.⁴⁴

In response to this opinion and similar opinions expressed at that time, the Commonwealth Government, in 1961, appointed the Martin Committee to redress the imbalance of the 1957 Murray Report. The Martin Committee was entrusted with the duty of considering the 'pattern of tertiary education in relation to the needs and resources of Australia, and to make recommendations on the future development of tertiary education in Australia'. The Martin Report was delivered in 1964 and tabled in the following year.

The report considered the expansion of knowledge, the raising of educational aspirations of the individual, and the needs of an industrialised society, and it made a number of major recommendations relating to non-university tertiary studies. It recommended that the further expansion of tertiary education should be through a variety of autonomous institutions, including institutes of technology and agricultural colleges offering diploma courses, and specialist colleges offering courses in areas such as visual arts and paramedical studies. The report also recommended that these institutions should include liberal studies and should

foster lifelong learning, which was necessary in an increasingly specialised and rapidly changing environment. To raise the status of these institutions to that of universities, the report advocated that they should offer courses up to and including degree level, that they should not offer trade subjects, leaving those subjects to technical colleges, and that they should be provided with adequate physical resources and well-qualified staff. The report also proposed the provision of finance to implement this scheme.

The Commonwealth Government made an interim grant to Queensland to develop these new colleges of advanced education, and provided, for the first time, tertiary scholarships for full-time study at the non-university tertiary institutions.

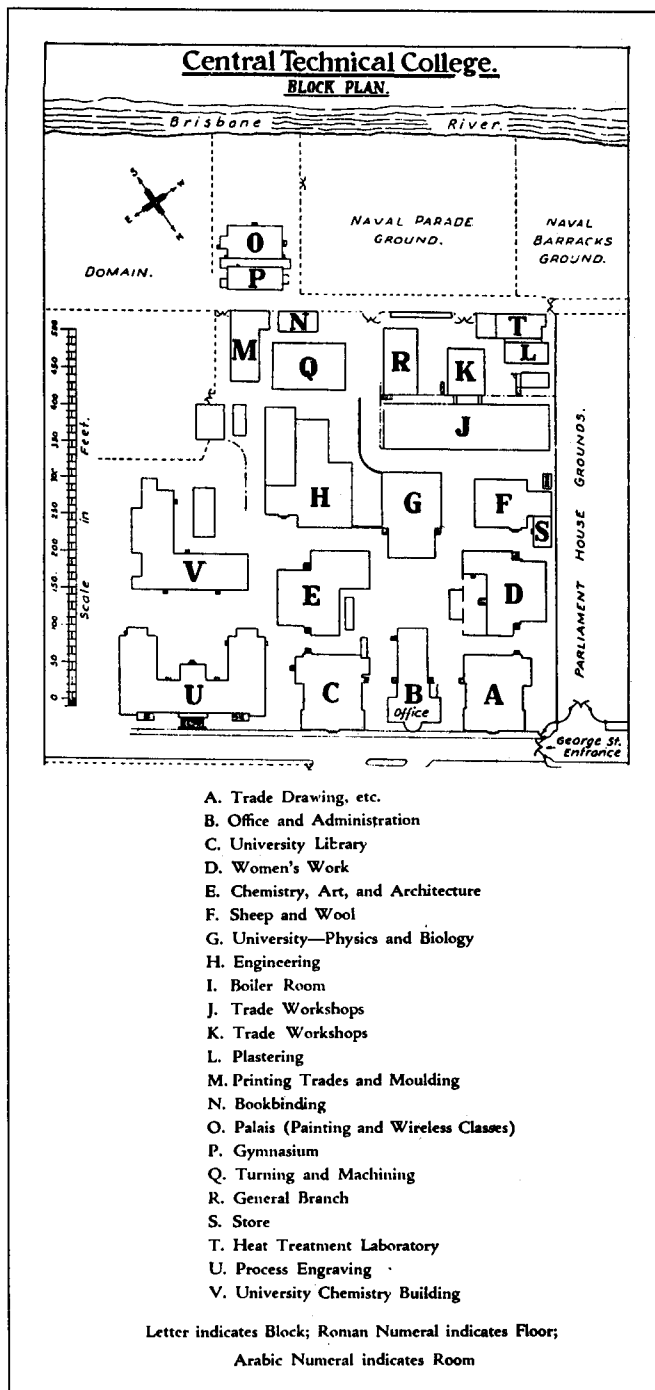
In 1965 a Commonwealth Advisory Committee on Advanced Education, with Dr Ian Wark as Chairman, was established to make recommendations regarding the allocation of grants to colleges of advanced education, and from 1967 the Commonwealth Government provided regular financial assistance for capital and recurrent expenditure for these colleges.⁴⁵

Departmental responses. Meanwhile, the Department had been kept informed of the deliberations of the Martin Committee, and it appeared quite ready to accept the consequent changes and the accompanying funding.

In 1963 the Director-General, Watkin, stated that technical education needed to be expanded through institutes of technology, and that these institutes would provide tertiary-level courses outside universities, which would raise the status of technical education and reduce pressures on universities.⁴⁶ In the same year, the Department sent the Principal of CTC, Clyde Gilmour, to review and report on technical education systems



Domestic science students, Central Technical College, about 1950.



Plan of Central Technical College buildings, 1949.

overseas. His report was to provide the basis for technical education changes in Queensland for the next decade.⁴⁷

In the *Education Act 1964*, the Queensland Government provided relevant legislation to accommodate the expected changes stemming from the Martin Report. Since the Technical Education Act of 1918, the only legislation prior to 1964 dealing with technical education had been the *State Education Act and Another Act Amendment Act 1957*, which made only one change: to provide a collective title for the 1908 and 1918 Acts - the *Technical Instruction Acts 1908-1918*.

The *Education Act 1964* repealed the Technical Instruction Acts and provided for technical education in Part V of the Act - Technical and Agricultural Education. Division I of Part V gave the Minister for Education

control of State technical colleges and the State agricultural college. This control included management of the colleges, the subjects and means of instruction, fees, students, property, facilities and equipment.

Division II established a Technical Education Advisory Council (TEAC), comprising two nominees of the Minister, who were to be chairman and deputy chairman, three ex-officio members - the directors of technical education, secondary education, and special education services, two University of Queensland representatives, an inspector of technical colleges, four representatives of industry and commerce, four representatives of professional associations allied with industry and commerce, and one nominee of the Minister from the trade union movement.

The major functions of the TEAC were to advise the Minister on courses of study and examinations for diplomas, certificates or other academic awards, 'regard being had to the needs of the community, industry and commerce and to the requirements of a sound general education', and to advise the Minister on matters pertaining to technical education generally.

Division III established an Agricultural Education Advisory Council (AEAC), with functions relating to agricultural education parallel to those of the TEAC.

The overall plan of the Department consisted of two phases. One was to create new technical colleges in Brisbane suburbs. Planning for this, begun some years earlier⁴⁸, was well advanced by 1965. The other phase was to transfer trade training courses progressively from CTC to the new colleges, to develop an institute of technology on the CTC site, and to develop similar institutes in other centres. The institutes were to concentrate on diploma and certificate level courses, leaving trade training to the technical colleges.⁴⁹

Drawing on the experiences of his overseas study trip, Clyde Gilmour set out to implement a four-tiered structure for those undertaking technical education. The first group, tradesmen, fulfilled the normal apprenticeship requirements. The second group comprised those who completed advanced trades studies, mainly with the goal of becoming supervisors of tradesmen. The educational requirements of these two groups were to be provided by technical colleges. The third group, and one for which hitherto little provision had been made, comprised technicians. These were to be semi-professionals working with professionals. The fourth group comprised professionals. The latter two groups were to attend institutes, the technicians to certificate level and the professionals to diploma level.⁵⁰

The new Queensland Institute of Technology (QIT) commenced operations in January 1965, with the establishment of six separate departments, engineering, chemistry, architecture, building, management studies and general studies. New courses and existing courses were organised for full-time as well as part-time students on two levels: technologist or full professional level, and technician level. In the past, full-time study in technical colleges had been very limited. The CTC retained the two levels of trade and advanced trade courses, and diploma and certificate courses for the Art Branch and the School of Sheep and Wool. The State Commercial

College ceased to exist in 1965, its courses being distributed among QIT, Brisbane, Evening Tutorial Classes and the Secondary Correspondence School.⁵¹

In 1967 two further Queensland Institutes of Technology were established: QIT, Capricornia (Rockhampton); and QIT, Darling Downs (Toowoomba). The three institutes, together with the Queensland Agricultural College and the Queensland Conservatorium of Music, became recognised as colleges of advanced education (CAEs).

In the same year, a conference of principals of QITs was constituted. This conference established committees to maintain comparability in content and standards of courses, and, at the same time, to enable each QIT to develop its own particular character and approach.⁵² Of major concern for the Principal of the QIT, Brisbane, Dr A.M. Fraser, was that QITs should establish a high status in the eyes of the community and that they should not provide substandard professional courses.⁵³ Some principals felt that, with autonomy just around the corner, they were unnecessarily restricted in their decision making by the Director of Technical Education.⁵⁴ However, they failed to realise that the Director had to act within constraints imposed by legislation, the power of other government bodies such as the Public Service Board and the Department of Works, and existing Department of Education precedents and policies.

The *Education Act Amendment Act 1970* established a Board of Advanced Education, responsible to the Minister for Education, to replace the TEAC and the AEAC, and to coordinate and supervise the development of autonomous colleges of advanced education. In the following year, 1971, the five Queensland CAEs became autonomous.⁵⁵ During the last year under the control of the Technical Education Branch, enrolments (full-time and part-time), of CAEs were as follows:

- QIT (Brisbane) - 4145
- QIT (Capricornia) - 307
- QIT (Darling Downs) - 433
- Queensland Agricultural College - 427
- Queensland Conservatorium of Music - 351⁵⁶

South Brisbane and Eagle Farm technical colleges, the first of the colleges to replace CTC, opened in 1966. They were followed by Yeronga College in 1967 and Kangaroo Point College in 1968. The Art School, CTC, became a separate institution and opened as the College of Art, Brisbane, in 1972. This college shifted to new buildings at Seven Hills in 1973. CTC closed at the end of 1973, the last trade to shift being painters and decorators.⁵⁷ Subsequently, other colleges were established in Brisbane (see Appendix 2).

The Technical Education Branch was also responsible for the establishment, under the terms and provisions of the Queensland *Rural Training Schools Act 1965*, of the Rural Training School of Longreach in 1967, which provided training for sheep and wool production, and the Emerald Rural Training School in 1971, which provided training for beef production. These were established on the advice of the AEAC, which was concerned about the inadequacies of existing facilities for agricultural education. The schools,

which provided two-year, post Junior courses, operated as autonomous institutions, with their boards directly responsible to the Minister for Education.⁵⁸

Courses

The Commonwealth Reconstruction Training Scheme

The Commonwealth Reconstruction Training Scheme was planned to re-establish men and women of the armed services into civil life. It began in 1944 as a limited scheme, developed considerably in the following year and reached a peak in 1948, after which the number of participants progressively declined. The Technical Education Branch was involved in this scheme, providing training in numerous trades, vocations and professions such as optometry, accountancy, surveying and draftsmanship.

Those wishing to enter skilled trades completed a full-time course of six months at a technical college, which was recognised as the equivalent of apprenticeship training. They then completed a period of training 'on the job' for a further two and a half years.⁵⁹

Mainstream primary and secondary education

The Technical Education Branch continued to supply manual training and domestic science teachers for rural schools, some State schools, secondary schools, and technical colleges, and commercial teachers for high schools and technical colleges.

In 1963 pupils proceeding to Grade 8 were transferred to secondary schools instead of remaining as the top class in primary school. At the same time, rural schools were redesignated primary schools, and the work of manual and domestic science teachers was restricted to high schools, with all Grade 8 students studying manual training or domestic science subjects. These subjects then became electives after Grade 8.

When CAEs became autonomous, they took over the task from the Technical Education Branch of supplying teachers of commercial subjects, manual arts (manual training) and home economics (domestic science).

Apprenticeship and trade courses

In 1944 State Cabinet set up a committee to inquire into matters relating to the employment and training of apprentices and minors. The committee included John Hill. The committee worked on the assumption that the leaving age would be raised to 15 at the end of the war, though it was not raised until 1964, and that vocational guidance would be provided for better selection procedures for apprentices.

The committee reported that much of the equipment at technical colleges was inadequate and out of date as a result of the depression and the war. It suggested that accommodation at CTC would be inadequate after the war, especially in view of university encroachment, and

that technical correspondence studies were only effective for students with good educational attainments. The committee also recommended changes to the system of apprenticeship.⁶⁰ Most of these were put into operation through the *Apprentices and Minors Act Amendment Act 1945*.

The amendments included the following changes to the training of apprentices:

- Welfare officers were appointed, and one of their duties was to check college attendance of apprentices.
- The minimum entry age was the school leaving age.
- First-year apprentices were to attend three-month, continuous daytime courses at a technical college, and during the second, third and fourth years, one whole day per fortnight. During their own time, first-year apprentices were to attend two evening hours per week, and four evening hours per week in the next three years.
- No fees were required.
- If an apprentice's college attendance was less than 80 per cent in one year, the employer was to withhold wage increases for up to twelve months.
- Correspondence students were allowed one full day per fortnight for study.

The Amendments also provided free post-apprenticeship higher trade courses of two years' duration, which tradespeople could attend in their own time.

The Technical Branch had to delay the implementation of those amendments requiring increased accommodation, staff and equipment, because the resources for supplying these were not available.⁶¹

In 1948 amendments to apprenticeship legislation provided an incentive for apprentices with unsatisfactory attendance to improve their attendance in the following year. Such apprentices, who achieved 80 per cent attendance in the year following the unsatisfactory year, were able to retrieve the amount of money, or part thereof, which they had previously forfeited. Furthermore, if apprentices passed an examination that they had previously failed, a similar concession was made for the amount forfeited for the failure.

In September 1950, as a result of an initiative of a Premiers' Conference, a joint Commonwealth-State inquiry into apprenticeship matters was instituted. One

CENTRAL TECHNICAL COLLEGE

STUDENTS'

The trade work of apprentices to all trades (Aircraft, Building, Engineering, Printing, Vehicle, and Hairdressing, etc.), as well as the work completed by students of the Architectural Branch, the Art Branch, the Engineering Branch, the Sheep and Wool Branch, and the Domestic Science Classes, will be open for public inspection on the evening of **MONDAY, the 3rd,** and on each day (3 p.m. to 5 p.m.) and evening (6.30 p.m. to 9.30 p.m.) up to and including **FRIDAY, the 7th** December next.

A N N U A L

In addition, the various College workshops will also be open for inspection during the same periods, and Instructors will be in attendance to answer any inquiries.

D I S P L A Y

It is unnecessary to remind all apprentices and students that it is their work which makes the Display possible, and for this reason they should be certain that their parents, relatives, and all their friends and the public generally do not miss the opportunity of seeing the various types of work that are undertaken as part of the technical training that is possible.

O F W O R K

The co-operation of all students in publicizing their Display is therefore invited.

1951

L. POWELL
Principal

Annual display of work, Central Technical College, 1951.

Department of Public Instruction.

TECHNICAL COLLEGE

Apprentice's

ATTENDANCE CARD

IMPORTANT

1. Ask your Instructor to initial this Card at each Day Attendance.
2. Keep this Card for your Employer's Inspection.

G. V. MARSH

Class APPLIED ELECT.

P.I./Tec. 13. Govt. Printer, Brisbane

YEAR 1951				PARTICULARS OF DAY ATTENDANCE				TERM
Date	Hour	Instructor's Initials	Remarks for Term	Date	Hour	Instructor's Initials		
15-2	6-8	gph	OK	14-6-51	6-8	gph		
22-2	6-8	gph	OK	21-6-51	6-8	gph		
1-3	6-8	gph	OK	28-6-51	6-8	gph		
8/3/51	6-8	gph	OK	5-7-51	6-8	gph		
15-3-51	6-8	gph	OK	12-7-51	6-8	gph		
22-3-51	6-8	gph	OK	19-7-51	6-8	gph		
29-3-51	6-8	gph	OK	26-7-51	6-8	gph		
5-4-51	6-8	gph	OK	2-8-51	6-8	gph		
12-4-51	6-8	gph	OK	23-8-51	6-8	gph		
19-4-51	6-8	gph	OK	30-8-51	6-8	gph		
26-4-51	6-8	gph	OK	6-9-51	6-8	gph		
3-5-51	6-8	gph	OK	13-9-51	6-8	gph		
17-5-51	6-8	gph	OK	20-9-51	6-8	gph		
24-5-51	6-8	gph	OK	27-9-51	6-8	gph		
31-5-51	6-8	gph	OK	4-10-51	6-8	gph		
7-6-51	6-8	gph	OK	11-10-51	6-8	gph		
				18-10-51	6-8	gph		

Apprentice's Attendance Card, 1951.



Apprentice bakers, Central Technical College, 1955.

of the major reasons for this inquiry was the need 'to meet the present and future requirements for skilled tradesmen'.⁶² In the following year, Brisbane commercial leaders forecast that a shortage of skilled tradesmen would continue for the next ten years. Commenting on the shortage, the Secretary of the Queensland Apprenticeship Executive attributed it mainly to the low birth rate during the depression years.⁶³

In 1952 the Department forwarded to the Commonwealth-State Apprenticeship Inquiry a submission in which the Department gave full details of the Queensland apprenticeship system, including statistics which showed that the proportion of school leavers seeking apprenticeship in Queensland had increased considerably since the end of the war in 1945. The major reason put forward for this trend was that parents, with indelible memories of the 1930s depression, believed that possession of a trade qualification gave greater job security. Based on statistical analysis, one of the conclusions of the submission was that the supply of apprentices in Queensland (and Western Australia) had increased at a greater rate than in other States, and would be able to keep up with the demand better.⁶⁴

The report of the inquiry, which appeared in 1954, predicted an overall shortage of tradesmen in Australia, commented favourably on the Queensland system of apprenticeship⁶⁵, and made ninety recommendations. Many of these were already in operation in Queensland⁶⁶, others were implemented in the next few years⁶⁷, but some, including Recommendation 73, 'Trade school instructors should undergo a teacher-training course', had to wait much longer until a more favourable financial climate appeared. The contents of the report encouraged the Minister for Education, Pizzey, to state that there was no need for any great change in the Queensland system.⁶⁸

One of the results of the Commonwealth report was the formation of the Australian Apprenticeship Advisory Committee. This comprised representatives of State departments of labour and technical education and apprenticeship authorities. One of the major aims of this Committee was to encourage a uniform system of apprenticeship in the States of the Commonwealth.⁶⁹

In the early 1960s, when the system experienced difficulty in producing the number of skilled workers required by industrial development, the Director-General, H.G. Watkin, expressed doubts about whether the existing system of training could meet the demands placed upon it, and suggested that it would need to change.⁷⁰ One pressing problem was the wastage in the most popular trades. In 1948 it was reported that apprentices were attracted away from their apprenticeships by other jobs offering higher rates of pay than that received by apprentices.⁷¹ Another possible reason for the wastage was the high failure rate in some of the apprenticeship examinations, especially in the skilled electrical trades.⁷² Whatever the reasons, in the five-year period ending 1959, the percentage of apprentices who did not finish their final fifth-year course was as follows:

electrical trades	47
fitting and turning	40
motor mechanics	26%
carpentry	66
plumbing	43%
painting	43
bricklaying	24% ⁷³

Another problem was that technical teachers were teaching techniques no longer relevant to industry. For example, some instructors in plastering were teaching elaborate moulding not used since the construction of the Regent Theatre decades earlier, and some instructors in carpentry and joinery were keen about inverted dome structures no longer used in the building industry.⁷⁴

In 1963 the Technical Education Branch participated in a special Commonwealth scheme of apprenticeship training for youth with Senior or sub-Senior academic qualifications. This provided for a period of twenty weeks' continuous training in fitting and turning, electrical trades and motor mechanics. The period of apprenticeship under this scheme was shortened considerably.⁷⁵

The *Apprenticeship Act 1964* introduced some very important changes to the training of apprentices. The Department of Education remained responsible for their training but relinquished overall control of the apprenticeship system to the Department of Labour and Industry.

Changes were made to the apprenticeship executive. Henceforth, the chairman was appointed by the public service, and the Director of Technical Education became an ex-officio member. Employers and employees continued to be represented by three members each.

Up to 1964, the minimum educational standard for entry to an apprenticeship had not changed since 1924. The 1964 Act divided apprenticeships into three categories, ranged according to skills needed. The highest skilled trades, such as electrical trades, required a minimum of a junior (Year 10) pass in English, science and one mathematics subject; the intermediate category, such as building trades, required completion of Grade 9 (Year 9) in the subjects listed in the first category; and the lowest category, such as cooking,



Bricklaying apprentices, 1959.

required completion of Grade 8 (Year 8). The minimum entry age was set at 15 and the period of apprenticeship was not to exceed four years.

The Act made provision for first- and second-year apprentices to attend college one day per week in the employers' time, with first-year apprentices having an option of attendance for five weeks for the first term and one week for each of the remaining two terms. Third-year apprentices were to attend college one day per fortnight in the employers' time and a maximum of four hours per week in their own time. Correspondence students were allowed half a day per week for study and two consecutive weeks' full-time study at the nearest college.

The Act changed the penalties imposed on apprentices. An apprentice who failed an examination had to repeat it in his or her own time. A fine of up to £4 was imposed for misconduct, non-attendance or failure to return correspondence papers, and further repetition of these breaches of conduct could lead to cancellation of indentures. Repeated failure in examinations could also lead to a cancellation of indentures. Failure to attend 80 per cent of the classes led to a weekly wage reduction of up to £3 for a period of up to twelve months.

After the 1964 Act, the pattern of full-time college instruction for apprentices followed the first of the two options provided by the Act, that is, the 'day release' system. In 1971 amendments to the Act made possible the introduction of block release training, which

involved seven weeks' continuous full-time education and training at a college in each of the first two years and up to seven weeks' in the third year. This was introduced for printing trades apprentices in 1972, and in the following years was progressively extended to other trades.⁷⁶ In those trades where block release training was introduced, apprentices experienced a lower failure rate.⁷⁷ Modifications to the scheme for some trades were subsequently made because it proved unpopular with many employers in those trades, especially those with small businesses.⁷⁸

One of the few apprenticeships that girls entered was hairdressing. The first technical course for this apprenticeship was provided by Norma Davie, in 1950, at CTC. Davie introduced a display provided by graduating students who presented a parade of hairstyles exhibiting their skills. This proved to be very popular and became an annual event.⁷⁹

Diploma and certificate courses

The Technical Education Branch diploma course of Electrical and Mechanical Engineering, which the university examined and for which it awarded diplomas, came under attack in 1951 from Professor M. Shaw, the University Professor of Mechanical Engineering. Shaw claimed that the standard of the diploma was too low and that it had not kept pace with modern developments. He also pointed out that, while engineering

diplomas issued in all other States were recognised for admission to associate membership of the Australian Institute of Engineers, the Queensland diploma was not acceptable to that organisation. This criticism prompted the establishment of a committee, comprising a number of engineers working in various departments of the public service, to revise the course. The duration of the course was extended from four to five years' part-time study, but the junior Examination entry level was retained. This standard was still unacceptable to the university, which, concerned about the reputation of diplomas it issued, awarded the last university diploma in this course in 1955.⁸⁰

In 1956 the Institute of Engineers proposed unsuccessfully to the Minister, L.F. Diplock, that the existing Junior Public Examination entry level be raised to Senior level, so that course graduates would receive full recognition as professional engineers. When the Government changed in 1957, the institute once more raised the issue of upgrading the diploma course with the new Minister, Jack Pizzey.⁸¹

Personnel within the Technical Education Branch strongly opposed such changes, claiming that the changes would end the course. At that time, many of the diploma students were tradesmen continuing their studies after the conclusion of their apprenticeship. The branch believed that the extra years involved in undertaking the Senior examination would discourage many of these students from undertaking such a long period of study, would also disadvantage country students, and would end a useful part-time study alternative to the university engineering degree, which already required a Senior examination level entry. The branch claimed that the existing system encouraged tradesmen to become engineers and that these men held their own against university graduates. It also maintained that their existing system was in the interests of the State because it believed that the State's pressing need for more engineers had a higher priority than the desire of the professional bodies to raise the standards of entry.⁸²

In his 1957 Report on Technical Education, the Director of Technical Education, Evans, spelt out publicly branch apprehension about proposed changes to the engineering diploma course. Invoking the long-standing Departmental policy of equality of opportunity, he asserted that junior entry to the Departmental diploma course opened a door to many capable students unable to take full advantage of secondary education. He believed that raising this entry level would place the course beyond the reach of such students, and deprive the State of a source of much needed capable professional personnel.⁸³ The Department and the Minister, Pizzey, adhered to this viewpoint.⁸⁴

During the latter part of 1957, the Australian Institute of Engineers, the Queensland Professional Officers' Association and individual diplomats lobbied members of Parliament and Cabinet Ministers to upgrade the course.⁸⁵ The press also took up the issue. The *Telegraph* in 1957 pointed out that all efforts since 1951 to upgrade the course to a level acceptable to the Institute of Engineers had failed.⁸⁶ Early in 1958, the

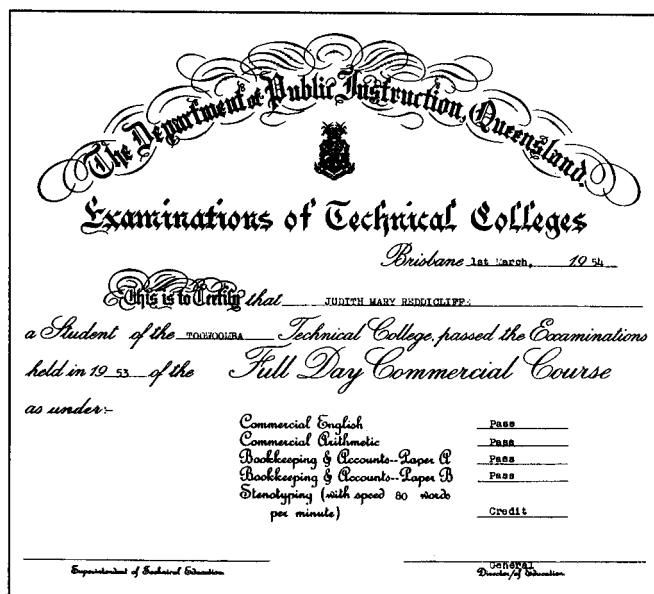
Telegraph and *The Courier Mail* drew attention to a poll of engineering diploma students taken in the previous year which showed that these students wanted the standards revised so that they would be able to graduate as professional engineers.⁸⁷

Influenced by these mounting pressures, Pizzey announced the formation of a special committee to examine and report on the diploma of engineering course.⁸⁸ The committee, which comprised representatives of the university, the engineering industry and the Department, reached a compromise agreement. The junior entry level remained, separate diploma courses were provided for Electrical Engineering and Mechanical Engineering, and the course length was extended. Successful completion of five years' part-time earned a certificate, six years' - a diploma, and seven years' - an associate diploma, which would provide associate membership of the Institute of Engineers. At the same time, the course for the Civil Engineering Diploma was changed so that it followed the same pattern. The changes were put into operation in 1960.⁸⁹

The Australian Chemical Institute began a similarly protracted, but less public, effort in 1939 to upgrade the Diploma in Industrial Chemistry. The Department resisted any changes but the institute kept up its efforts, with the result that, in 1954, the Technical Education Branch increased the course duration from four to five years' part-time.⁹⁰

In 1960 the Technical Education Branch offered associate diplomas, diplomas and certificates in the fields of agriculture, architecture and building, art, chemistry, commerce, engineering, home science, and mining (for details, see Appendix 4). The most popular diploma courses were the three branches of engineering, with a total enrolment in 1961 of 916 students. The most popular certificate courses in that year were commercial, with 1836 enrolments.⁹¹

When Gilmour became Director of Technical Education in 1964, he ensured that changes were made to professional courses that made them acceptable to the



Commercial examination certificate issued to a student from Toowoomba Technical College, 1954.

appropriate professional associations and suitable for the needs of industry. These courses were technologically-oriented rather than science-oriented.⁹²

The numbers of students and the types of courses within an industry reflected the changes in that industry. For example, during the early 1950s, courses in mining expanded to meet mining needs. These courses were centred on Ipswich Technical College, reputed at that time to have better aids for mining education than any other college in the Commonwealth.⁹³ By 1958 increased mechanisation in mining had led to a fall in enrolments, but had created a need for more advanced training.⁹⁴

When the institutes of technology were established, they took over, with some exceptions, the diploma and certificate level courses from the technical colleges. At the same time, since the institutes, together with the Queensland Agricultural College and the Conservatorium of Music, were designed to become tertiary institutions, the course levels at these five institutions were raised and made comparable, and the Senior Public Examination became the entry level. Diploma courses required three years' full-time or six years' part-time study for an associate diploma, and four years' full-time study for a fellowship diploma. Postgraduate diplomas in some courses were also instituted. For certificate courses, the junior Public Examination was the entry level.⁹⁵ Initially, the certificate courses had been important to the smaller institutes to maintain viability.⁹⁶ As the institutes became consolidated, many certificate courses were returned to technical colleges.

Rivalry over tertiary level studies between technical colleges and the university continued and was never far from the surface, as illustrated by the following instances.

In 1944 the CTC Principal, McGillivray, complained to the Director-General, Edwards, that able students in the past, who could not afford to go to the university, attended CTC, but the university was now more accessible to such students. McGillivray said that, as a consequence, future CTC students would be of somewhat lower ability.⁹⁷

In 1957 the CTC Principal, J. McGrath, prepared a lengthy report on the CTC in response to a request from the Director, Evans. McGrath maintained that CTC was more suitable for training for entry to professional institutes than the university because CTC had a closer association with the practical work and the requirements

of the various fields of expanding technology. In another part of the report, McGrath complained about university occupancy of buildings urgently needed for CTC courses. McGrath said that no sooner did one section of the university physics department move out of CTC grounds than its accommodation was immediately taken over by a section of the university engineering department.⁹⁸ In 1958 Evans reported that, although the university was now taking accountancy classes, this had little effect on enrolments at the State Commercial High School and College.⁹⁹ Speaking to a conference of high school principals and deputy principals at Brisbane State High School in 1963, Evans claimed that good managers, highly trained technologists and technicians were best provided by technical education which kept close to industry. In an obvious reference to the university, Evans went on to say that a country could suffer too long from an overemphasis on academic values.¹⁰⁰

Students

The growth in population and the greater demand for some form of post-primary education in this period is reflected in the increase in the total college enrolments from 6667 in 1944 and 8777 in 1946 to 28 128 in 1973.¹⁰¹

Students in technical colleges during this period tended to be older on the average than high school students, and problems with discipline tended to be fewer. In fact many students regarded earlier as misfits in school settled down and worked successfully at technical college because they were clearer in their goals.¹⁰²

On the other hand, the occasional rebel and 'no-hoper' made life difficult for technical teachers. During the 1950s, some apprentices at CTC had an effective system of avoiding classes. In one building, one of the apprentices would put a threepence under an electric light bulb before the beginning of class. When the teacher entered the room and put the light on, the fuses would be blown. The class for that lesson would then be dismissed, because it usually took some time to fix the lights.¹⁰³ Some apprentices doing courses at the South Brisbane Annexe used to drop bungers through holes in the floor to liven up proceedings. Then there was the occasional apprentice who, after polishing off a pie for his evening meal, would then recycle the grubby paper container as note paper.¹⁰⁴