INTRODUCTION

This is essentially a study of the development of Queensland Technical Education during approximately its first 100 years. This development is examined in relation to the contemporary social, political and commercial pressures. The study determines the reasons for technical education developing as it did, and whether there are patterns to that development. It is not merely a chronological history of events.

The starting and end points of this study were selected as each was a period meaningful to Technical Education in Queensland. The 1870s were a decade containing significant requests for Technical Education, while the 1970s were a decade of pivotal influence and change culminating in the amalgamation of Technical Education with Adult Education. This amalgam was called the Division of Technical and Further Education, or TAFE.

While those directing Queensland Technical Education may argue that a 'clean slate' approach to the future would be more appropriate, surely due cognisance should be given to the past. The future is often shaped by the past, and unless Queensland Technical Education is aware of its past, and the contemporary pressures which influenced events, it cannot make informed decisions on whether the past can be safely ignored. Currently, there is no single study on why Queensland Technical Education developed as it did. At the very least, this study addresses that omission.

In researching this thesis, it became evident that despite the major changes that have occurred in the first 100 years of technical education in Queensland, almost nothing had been published on the development of technical education during this period let alone any analysis of changes and the reasons for them. This point was particularly noticeable when comparing the lack of publications on technical education with the vast amount published on primary and secondary education, religious education, and on universities and CAE's.

In the Queensland context the expression 'Technical Education' has always been somewhat ambiguous. During the late 1800s it was a 'catch-all' phrase embracing many dissimilar activities. There was professional training with practical rather than theoretical content. There was also training in various trades and occupations, in art

and drawing, in domestic science, and in commerce. Two distinguishing features identifying most technical education classes during this period were that the topic was not already offered by either the Primary or Grammar schools, and that it was generally considered 'useful'.

By 1977, technical education in Queensland had become an educational system in its own right, with multi-purpose institutions offering post-compulsory and technical education for a variety of client groups including accredited further education, vocational post compulsory education, apprenticeship training, leisure, recreation, pre-employment training, pre-vocational education, personal enrichment, and those with special needs in the community.

Throughout most of its history, Queensland technical education has had a strong ideological component. Prior to 1914, its most effective and real contribution was in opening opportunity to the socially and educationally underprivileged; but the general insistence was always on its immediate industrial relevance. This was largely an illusion, but it served the valuable purpose of nourishing technical colleges while they performed multi-functional tasks. Towards the 1920s however, industrial relevance overtook the ideological component.

The hey-day of Queensland technical education was in the late 1800s, when it became a cause which appealed to free-traders, protectionists, the labor movement, the nation-builders and many other important (and self-important) social groups. In this period it was seen as a means of liberating the potential of democratic man, and thus a prime plank in the liberal platform. In 1882 Lilley claimed that the object of technical education was twofold; to improve the general knowledge of tradespeople, and to educate them in advanced aspects of their trade, consequently making them more useful to employers.¹

By the 1970s, the term 'technical education' had come to be used widely in Queensland with much the same connotation as the phrase 'further education' in Great Britain. Technical education now consisted of systematic or formal courses, generally vocational in character and designed for those who had completed at least the compulsory portion of high school. As a definition however, this is too broad, for it fails to distinguish technical education from other forms of post-compulsory education. As it was commonly used in Queensland, the term 'technical education' excluded

S. Murray-Smith, A History of Technical Education in Australia with special reference to the period prior to 1914, PhD Thesis, University of Melbourne, 1966, p.xi.; *Brisbane Courier*, 15 August 1882, p.3.

university undergraduate and postgraduate courses, teacher training in teachers' colleges, and the systematic vocational courses provided in institutes of technology.

The boundaries between technical education and other branches of education often appeared quite arbitrary. Systematic courses, for example those undertaken by future engineers, architects, teachers or industrial chemists were regarded as tertiary education if offered in universities, teachers' colleges or institutes of technology, and technical education if offered in technical colleges. The difference was in the character, atmosphere and ultimate objectives of the institutions rather than in the vocational destination of the students, or in the technical and scientific content of the courses. In general, although all post-compulsory educational institutions provided some degree of vocational preparation, technical education was more deliberately vocational and less consciously scientific.²

As the necessity for relating economic policy to manpower policy was increasingly recognised by various Queensland governments, technical education was finally seen as a means of building a pool of highly trained manpower for further development. Thus unlike the universities, technical colleges came under the direct control of the government to allow the pursuit of economic development policies. From 1910 when Central Technical College was created, technical college training in Queensland was almost always designed to meet State needs for skills.

To sum up, during the period 1870 to 1977, technical education in Queensland covered a broad field. Queensland's technical colleges, training students for skilled and technical occupations, and directed by the State, co-operated closely with industry. The overwhelming majority of students attending these colleges studied part-time while concurrently working to supplement and facilitate their technical education.

Ever since its inception, technical education has been expected to fill all the educational and training gaps. In the ten to twenty year period after Federation, most technical colleges in Queensland provided not only 'continuation' courses for post-primary students (a role relinquished only when high schools were established), but also university courses under licence from the University of Queensland. Even as late as 1976, some technical colleges were still supplying classes in the practical aspects of engineering (for example, welding) for students of the University of Queensland and of James Cook University. In war-time, technical education was expected to train both defence force personnel and civilians. In times of economic depression, technical

H. King, 'The Administration and Organisation of Australian Technical Education', pp.88-90, in C. Sanders, (ed.) *Technical Education for Development*, Nedlands, University of Western Australia Press, 1966, pp.66-97.

education was expected to run ameliorative programs for the unemployed. When Queensland technical education lost its Diploma courses to the Queensland Institutes of Technology, and these courses were subsequently upgraded to degrees, technical education then developed certificate and diploma courses to fill the training gap for para-professionals.

Whilst the other sectors of education have had clearly defined roles, throughout its long history technical education in Queensland has filled all the educational and training needs of the community not already supplied by the other educational sectors.³

However, when attempting to define 'Technical Education' before the 1970s, we could do much worse than adapt Myer Kangan's definition of Technical and Further Education, in that technical 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 [conducted through universities], whether the individual is using the program with employment as a primary aim or with the aim of job improvement . . . It does not include activities which have no direct educational purpose and which are not [in] a systematic sequence.⁴

Sources

The seed of this study sprang into being many years ago. During the intervening period much interesting data, with the possibility of being pertinent to the theme, were perused and stored away. When an explicit topic was decided, and this thesis finally eventuated, that data were retrieved and categorised. Much of it however, has since been found to be only of peripheral interest. The processes outlined here demonstrate that, at the very least, there needs to be a tight focus before research can be productive.

G. Goozee, The Development of TAFE in Australia 1970 to 1992: An Historical Perspective, M.Ed. Thesis, UNE, 1992, passim.

⁴ Australian Committee on Technical and Further Education, TAFE in Australia: Report on Needs in Technical and Further Education, (Kangan Report), Vol. 1., Canberra, AGPS, 1974, p.7.

The foci of this study were many. Pertinent events had to be located, evaluated and then arranged chronologically. These were obtained originally, mainly from secondary sources as primary sources had not then been established. Then, as primary sources relevant to each event emerged, the circumstances surrounding each had to be established. This involved broad ranging and interlinked research - secondary and primary documents, newspapers, archives, reports, government acts and, more than occasionally, parliamentary papers and departmental records.

All of these partially assimilated (sometimes still raw) data were then savoured, intermingled and scrutinised for flavour, relevance and relationships. The result was then assessed in an attempt to synthesise the various factors, and to determine the need for further investigation of the origins, development, and impact of each event. A determination was then needed as to the most advantageous method of presentation.

This study addresses a number of questions which are particularly pertinent to Queensland Technical Education, including: What factors led to the establishment of Queensland's first College of Technical Education?; What were the circumstances that led to establishment of a formal system of technical education in Queensland?; To what extent did technical education impact on the education of Queenslanders?; How was technical education involved in the establishment of both secondary education and CAE's? What factors led to technical education losing its Diploma courses to tertiary educational institutions? Finally, what were the significant factors in each phase of development of Technical Education?

In an effort to answer these questions and provide a systematic account and analysis of events, this study starts with an attempt to define technical education, and follows with an investigation of what has been written, although in a few instances the relationship to the topic may not be immediately obvious. It then moves through each event, discussing the forces which may have played a part, and then concludes with a summary and final discussion.

A major problem with this type of study is the distraction offered by interesting but irrelevant data. Too often considerable time and effort can be consumed on a topic not relevant to the study. Or is it relevant? Tosh offers possible solutions to this when illustrating two different approaches to gathering data. He designates these solutions as a source-oriented approach, and as a problem-oriented approach. Each method however, can pose difficulties particularly when predicting the relevancy of sources.⁵

J. Tosh, The Pursuit of History: aims, methods, and new directions in the study of modern history, 2nd Ed., New York, Longman, 1991, p.54-55.

In a source-oriented approach a researcher takes one source or group of sources falling within the general area of interest and extracts whatever is of value. This approach allows source content to decide the nature of the inquiry. While this method may be appropriate for a newly discovered source, it may also yield only an incoherent jumble of data.

In a problem-oriented approach a researcher formulates a specific research question, usually prompted by a reading of the secondary authorities, and the relevant primary sources are then studied. The bearing which these sources may have on other issues is ignored, and the researcher proceeds as directly as possible to the point whereby conclusions can be presented. While this method may be appropriate when researching a narrow topic, it may also lead to the 'loss' of much that is indirectly pertinent and useful in the broader view.

In this study a combination of both approaches has been used. For example, in 1921 a speech by the then Governor of Queensland, Sir Matthew Nathan emphasised that he and other community leaders were deeply concerned by the then preference for commercial education for women instead of educating them for 'womens work'.⁶ His speech deprecated offering any technical education for women unless it had potential use in the home. Is this article relevant? It is certainly interesting! Was Governor Nathan merely an articulate misogynist with an attitude problem which would delight an equity prosecutor, was he using his position as Governor to vent his personal spleen?; or was he, as Governor, doing his duty and reflecting the contemporary opinion of society? Or to state it succinctly - which hat was he wearing at the time? If the hat was that of Governor reflecting the contemporary opinion of society, then it is indeed relevant, otherwise it is merely an interesting reflection on Governor Nathan.

Another example is that of a memorandum in 1929 from Bernard Joseph McKenna⁷ which is quite harsh.⁸ In this memorandum, McKenna refers to the Domestic Science Advisory Committee which he had just disbanded. Should this memorandum be used? It is certainly relevant but may be the subjective opinion of an individual. Unless the sentiments can be supported by other primary sources, it probably should not be used to support an argument of interference by the committee. It could still be used, but should be utilised as an individual's opinion and not necessarily Department opinion.

⁶ Daily Record, 27 October 1921, p.6.

⁷ Director-General of Education 1923-1936.

⁸ Document 35925, 4 July 1929, A/15689, QSA.

Particularly relevant reports are the Report of the Commission of Inquiry into Apprenticeship 1976 (Anderson), TAFE in Australia: Report on Needs in Technical and Further Education (Kangan), Tertiary Education in Australia, Report of the Committee on the Future of Tertiary Education in Australia (Martin), Report of the Committee of Inquiry into Education and Training (Williams), and the Report of the Commonwealth-State Apprenticeship Inquiry (Wright).

Although both examples given come from Primary Sources - the contemporary records, the birth of the topic's history - they are not necessarily free of bias. Primary material may be written from a narrow perspective, and jaundiced by subjectivity. Primary sources used are the 'Blue Books', newspaper articles, documents of various Queensland parliaments, government acts, reports, and original documents. Intriguing original documents include J.D. Story's instructions in 1918 to his Minister, *Points to be raised in connection with the proposed Technical Education Bill*; and a confidential submission in 1952 to the Commonwealth-State Inquiry into Apprenticeships.⁹

The 'Blue Books' (always bound in blue) contain names and positions of Queensland parliamentarians, public servants, teachers and police from 1859 to approximately 1923. After 1915 the data become somewhat sketchy. The 'Blue Books' are particularly useful for verifying the occupier of various positions. They also list the various Governors of the State, the date each assumed office and the date each retired.

Every issue of newspapers such as the *Moreton Bay Courier* which became the *Brisbane Courier* which in turn joined with the *Daily Mail* to become *The Courier-Mail*, is available. Contrary to this is a newspaper such as the *Telegraph*, which ran from mid 1870s to mid 1980s, with various issues unable to be located - including all issues from 1922 to 1928.

Documents of the various Queensland Parliaments have sundry names. There are the Queensland Parliamentary Debates, the Queensland Parliamentary Papers, and in particular, reports of the variously described Ministers. Before 1902, papers published in Parliamentary Papers can be found listed as Queensland Parliamentary Journals, Journals of the Legislative Council, Journals of the Legislative Assembly, or Votes and Proceedings of the Legislative Assembly. From 1902 to 1922, parliamentary papers contain the papers presented to the Legislative Council and the

⁹ Memorandum, J.D. Story to the Minister for Education, 4 September 1918, A/16264, QSA.; Commonwealth-State Apprenticeship Inquiry (Wright Report), Report of Committee, Government Printer, Melbourne, March 1954, p.2.

Legislative Assembly. With the abolition of the Legislative Council in 1922, Parliamentary Papers contain only the papers presented to the Legislative Assembly.

Any study of contemporary pressures on Queensland technical education cannot ignore politics, unions, or government reports. This study does not attempt to do so, consequently secondary sources pertaining to politics include Greenwood and Laverty's Brisbane 1859-1959 - a History of Local Government, Cameron's 125 Years of State Public Works in Queensland 1859-1984, Gough's Queensland: Industrial Enigma, Linge's Industrial Awakening, Murphy and Joyce's Queensland Political Portraits 1859-1952, Murphy, Joyce and Cribb's The Premiers of Queensland, the Queensland Government's Our First Half-Century, a review of Queensland Progress, and Waterson's Biographical register of the Queensland Parliament, 1930-1980, with An Outline Atlas of Queensland Electorates 1859-1980.

Two particularly useful sources on Queensland politics are Bernays' Queensland Politics During Sixty (1859-1919) Years, and Queensland - Our Seventh Political Decade, 1920-1930. Together these cover the political scene in detail from 1859 when Queensland became a State until the end of 1929. Lack takes over from here with his Three Decades of Queensland Political History 1929-60.

Those secondary sources pertaining to Unions in Queensland include Spaull and Sullivan's *History of the Queensland Teachers Union* and Whitehouse and Wiltshire's *The History of the Queensland Professional Officers Association*. The first concentrates on the development of the Queensland Teacher's Union while the second is the history of the Union which represented Technical Teachers in Queensland until the end of 1993.

A particularly useful secondary document concerning government reports of inquiry is Davies' Some reflections on the Clash of Ideas and Personalities within the Martin Committee. This article gives us a fascinating and relevant insight on the stratagems which occurred within the committee. Davies clearly illustrates how Martin's personality and ideological convictions influenced, if not determined, the committee's recommendations. Martin feared that if universities were to expand rapidly they would be diverted from their basic purposes: pure research and scholarship. He believed that vocational education and applied research were best left to other types of higher education institutions.

An equally useful secondary document based on the Martin Report is Jakupec and Roantree's *Impact of the Martin Report on Technical and Further Education*. This article analyses the relationship between TAFE and higher education. It takes a serious look at TAFE in light of the Martin Committee recommendations and predicts that

TAFE will constitute a new sector of higher education in Australia, provided it can be freed from state control.

Secondary sources on general education outside Queensland include Austin's Select Documents in Australian Education, 1788-1900, and Australian Education, 1788-1900: Church, State and Public Education in Colonial Australia. The first contains useful sources while the second is very broad-ranging, a useful text and includes an extremely good map of the colonies. There is Barcan's History of Australian Education which has a general but economical overview of the growth of Technical Education in Queensland. This text relies very strongly on Goodman, Holthouse, and Wyeth but uses a minimum of primary sources. Spaull's Australian Education in the Second World War argues that Technical Education in Australia, alone of all the educational systems, was reasonably prepared for the training needed to help in the conflict. A particularly interesting secondary source is Meek's Differentiation in Higher Education. This looks at the problem of differentiation in higher education from a sociological perspective, and examines the national post-secondary system.

Secondary sources on general education inside Queensland include two by J.D. Story who rose from a clerk in the Education Department to be Queensland's first Public Service Commissioner, and Vice Chancellor of the University of Queensland. His Fifty Years of Education in Queensland and State education in Queensland - a retrospect and a forecast are both useful sources. Another is Wyeth's Education in Queensland. A History of Education in Queensland and in the Moreton Bay District of New South Wales. This includes a general survey of Queensland education, but lists few sources. Goodman's Secondary Education in Queensland 1860-1960 characterises technical colleges in general from 1902 to 1907 and details the connections between them and secondary education in particular between 1902 and 1920.

From 1975 to 1990, the Educational History Unit had a writing team of Logan and Clark who were quite prodigious in their output. Logan's Centenary History of Home Economics Education in Queensland, Logan and Clarke's State Education in Queensland: A Brief History, and Clarke's Female teachers in Queensland State Schools - a history 1860-1983, add to the collection of secondary sources. The second reference includes a general overview of State Education in Queensland and has a small amount specifically on technical education. It also has a restricted and select chronology of Queensland education from 1824 to 1981, but unfortunately, the main sources relating to technical education are restricted almost to Goodman, Holthouse, and Wyeth. Other useful secondary sources on general education inside Queensland are Turney's Sources in the history of Australian Education, 1788-1970, and Pioneers of Australian Education.

Secondary sources on technical education outside Queensland include Reeves's History of Tasmanian Education, Eltham's Report on Technical Education Systems in Other Countries, Spencer's Report on Technical Education in Australia and New Zealand, and Blake's Vision and Realisation: a centenary history of state education in Victoria. There is also White and Birman's The Apprenticeship Training System in Western Australia: A History.

Secondary sources concentrating on technical education inside Queensland are rare. There is Leonard Morris' typescript, History of Apprenticeship, McKeering's History of South Brisbane College of Technical and Further Education, and Clarke's monograph Technical and Further Education in Queensland: A history 1860-1990. The first two concentrate on very specific aspects of the topic, while the third is a very general history. All however, are useful and complementary. Details concerning Ipswich Technical College are covered by 50 Years of Technical Education in Ipswich and Hack's manuscript The Ipswich Technical College - Sixty Years of Local Control. Neither strays from their topic theme.

There are many dissertations and theses relevant to this study. These can be generally grouped into Politics, Queensland, Education, and Technical Education. As the Labor Party was in Government for a considerable part of the time spanned by the study and strongly supported vocational education, Rayner's *The Evolution of the Queensland Labor Party to 1907* is particularly relevant. Sir Charles Lilley is considered almost the 'father' of technical education in Queensland therefore Pearson's *Sir Charles Lilley in Queensland History* must be included.

The social, political, and commercial settings of the study are reflected in Tomkys' Queensland Immigration, 1859-1901, Lynch's Cultural Developments in Queensland, 1880-1930, Crook's Aspects of Brisbane Society in the Eighteen Eighties, Pearson's The 1890's: Turning Point in Queensland History? and Queensland 1860-1888, Lawson's Immigration into Queensland 1870-1890, and Ling's Educational policy and the provision of popular post-elementary education in eastern Australia, 1880-1914.

The educational background is reflected in O'Dea's The Scholarship System, Crane's The Development of State-controlled Education in New South Wales from 1900-1922, Hay's The Development of Public Secondary Education in New South Wales from 1911-1954, French's Secondary Education in the Australian Social Order 1788-1898, Hunt's State Aid to Denominational Schools in Queensland, 1900-1940, Anderson's A History of Teacher Training in Queensland, Lawson's Secular Education in Queensland: Some Aspects of its Evolution to 1875, and Lawry's Some Aspects of Queensland Education 1859 to 1904.

One thesis in this area which is particularly useful is Tyrrell's *The Reform of State Education in Queensland*, 1900-1914. This shows that State Education in Queensland experienced important changes during that period and that the State extended its control to both Secondary and Technical Education.

Those theses more specific to the area of Technical Education, include Phillips' The Influence of the English Tradition on the Technical Education Systems of Australia, Ling's Colleges for working men: a comparative analysis of the foundation of the technical colleges of Sydney and Melbourne and their autonomy in their early years, Beeby's Bridging the Gap which is an interesting account of the development of technician courses in South Australia, Robson's The Development of Junior Technical Education in Victoria 1868-1966, and Sheedy's Post-World War II development of commercial courses for girls in Victorian technical schools, with special reference to the RMIT.

There are also Cleary's *The North Brisbane School of Arts, 1849-1899* which closely examines the foundation of technical education in Brisbane, Leslie's *Technical Education during World War II*, and Murray-Smith's *A History of Technical Education in Australia with special reference to the period prior to 1914*. This latter contains a detailed historical analysis of the growth of Technical Education in Australia, with emphasis on pre World War I development. More recently is Green's *The Growth of State Controlled Vocational Education in Queensland under Leonard Morris, 1909-1938* which has an excellent bibliography, and specifically within the Queensland setting, is second only to the seminal work from Murray-Smith.

Many other sources are used to determine background. These include books, articles, journals, newspapers and reports directly pertinent to Queensland technical education, or aspects of that particular theme. They also include those references which interpret aspects of contemporary social, political and commercial pressures affecting technical education from 1870 through to 1977.

Those background documents with Technical Education as their theme range from the lightweight Spanners, Easels & Microchips: A History of Technical and Further Education in New South Wales 1883-1983 which provides a general overview of the growth of Technical education in New South Wales, through to Bruce's A Quarter Century of Technical Education in New South Wales. The latter skims through the growth of technical education in that state to 1908, while discussing overseas technical education, in eloquent and effusive detail, country by country.

There is Murray-Smith and Dare's The Tech: A Centenary History of the Royal Melbourne Institute of Technology as well as Murray-Smith's Technical Education: The Lines of Development, Technical Education in Australia: a historical sketch, and his

Colleges and the Community. This last article is particularly powerful as Murray-Smith argues that Technical Education, as a system, had a much better and more clearly defined objective, than did other forms of post-secondary education.

Other background documents with the same theme are William's Technical Education in Australia and Rasmussen's Poor Man's University - 75 years of Technical Education in Footscray. There is the magnificent bibliography which Sanders included in his Technical Education for Development, and there is also the excellent Development of Technical Education in France 1500-1850 from Artz, and Hyde's The Development of Australian Tertiary Education to 1939.

Those background documents which have education, other than technical, as their theme include Barnard's A Short History of English Education from 1760 to 1944, Cubberley's History of Education: Educational practice and Progress considered as a Phase of the Development and Spread of Western Civilisation, Hyams and Bessant's Schools for the People? : An Introduction to the History of State Education in Australia, Jones' The Origins of Civic Universities: Manchester, Liverpool and Leeds, Kelly's History of Adult Education in Great Britain, and Thiele's Grains of Mustard Seeds. This last is a narrative history of South Australian Education from 1875 to 1975. There is Wheelwright's Higher education in Australia, White's The Community and Post School Education in Western Australia, and Whitelock's The Great Tradition: A History of Adult Education in Australia.

Closer to Queensland but with the same theme is Cunningham's confusingly titled *Technical Education in Australia* which contains a well-written, historically reliable account of general Education in Queensland from a teacher's viewpoint and covers the period from 1887 to 1940. There are Clarke's *Corporal Punishment in Queensland State Schools*, Logan's *Education Regions in Queensland - Towards a Philosophy and Practice*, 1937-1988, Logan and Watson's *Soldiers of the Service - Some early Queensland Educators and their Schools*, and Thomis' *A Place of Light and Learning: the University of Queensland's first Seventy Five Years*.

One other source with the same theme is Holthouse's *Looking Back: 150 years* of *Queensland schools*. This is a well-illustrated overview of the title theme from a human interest view point. It contains a light generalisation of the growth of Technical Education in Queensland but unfortunately the author, a prodigious writer, fails to acknowledge sources.

This study has to determine contemporary social attitudes, and how people viewed the need for technical education. As part of the search for this data, background documents on Queensland are particularly useful. In the late 1890s, Beatrice Webb and her brother toured the world and described the countries and social

luminaries they met. These were produced as *The Webbs' Australian Diary - 1898* and were re-released after editing by Austin. Beatrice, an obnoxious and extremely self-opinionated person, found D.R. McConnel, ¹⁰ the first Principal of a Technical College in Queensland (Brisbane Technical College), to be a

... ruddy-coloured Scotchman [sic] ... a revolutionary visionary, ... a man with more originality than he had training. He was all for new-fangled technical as against old-established classical Education.¹¹

This type of background document is useful and often rewarding as it can bring people to life, it can 'put flesh on the bones'. It can also be very distracting and draw one away from the central theme of research.

Two excellent books on the development of Queensland are Fitzgerald's A History of Queensland: from the Dreaming to 1915 and A History of Queensland: from 1915 to the early 1980s. These are well supported by Lawson's Brisbane in the 1890s a Study of an Australian Urban Society and Bolton's A Thousand Miles Away: A History of North Queensland to 1920.

Two other books are well worth considering. The first is Evans' Loyalty and Disloyalty - Social conflict on the Queensland Homefront, 1914-18 which is splendidly written, well researched, well referenced and interesting as well. Evans details social problems, attitudes and pressures from approximately 1910 to 1920, and specifically relates them to local and world opinions caused by World War I. The second is Kingston's My Wife, My Daughter and Poor Mary Ann; women and work in Australia. This book shows Kingston as confused in her objective but it is useful and interesting. Kingston tries to follow a feminist line and claims that women of Australia up to 1920 were victims of their fate, but she continues on to illustrate that women did well despite their pre-ordained 'role-in-life'. This book is useful in that it illustrates the personal, social and class problems affecting women wishing to avail themselves of non-domestic vocations, and vocational education, early this century.

The order of this thesis is chronological in that from Chapter One to the penultimate one, each chronologically follows on from its predecessor. This organisation has been employed as each of these chapters addresses a specific period in the growth of Queensland Technical Education.

The first successful attempts to establish technical classes in Queensland occurred in 1881 but there had been unsuccessful attempts in the previous decade.

see Appendix 2 - Details on Other Selected People.

¹¹ A.G. Austin, (ed.), *The Webbs' Australian Diary - 1898*, Melbourne, Pitman, 1965, pp.42-43.

These auspicious classes stumbled along, slowly expanding in number until they finally outgrew their sponsor, and eventually, in 1889, they grew into Queensland's first Technical College. But even then technical education was still a foundling as, until 1898, successive State governments had steadfastly refused, except for some funding in the form of subsidies, to be associated with it. This period of ad-hoc development, 1870-1898 therefore, is the focus of Chapter One. The years 1898-1899 were selected to separate this and the following chapter as it was the first time that a State government had publicly acknowledged more than passing interest in a technical education system.

After 1898, the State government wanted technical education to be better organised so that greater control over subsidy funding could be maintained. From then until 1914 was a period of constant change as a system of technical education slowly crystallised. By 1914 the anti-liberal educational evolution had taken over and technical education, now a serious educational force, was being increasingly identified with national destiny, people as social units, and educational specialisation. And Queensland Technical Education was ready to move into its new buildings. This period of dramatic change, 1899-1914 therefore, is the focus of Chapter Two. The years 1914-1915 were selected to separate this and the following chapter as Queensland Technical Education was publicly moving into a new phase of development.

Whereas Chapter Two encompassed a period of almost continual remodelling of technical education in Queensland, Chapter Four covering the period 1915-1937, is almost noteworthy for being a period of restraint and conservation. It begins with Queensland Technical Education moving into its brand-new, only Technical College, and ends with the death of its founding Director and protector. In between there was impressive and remarkable consolidation, educational experimentation, belt-tightening, adjustment, and movement towards efficiency, but little in the way of major change. The years 1937-1938 were selected to separate this and the following chapter as there was dramatic transformation in leadership style, and there was now to be major differences in training demands.

Chapter Four is remarkable for three outstanding factors. The first factor was lack of leadership for Queensland Technical Education - not the lack of a leader - but lack of direction from a strongly supportive personality as the previous director had been. The second factor was exhaustion - both in finance and resources. After passing its design limits manyfold in the interest of national defence, rehabilitation and reconstruction, Queensland Technical Education was exhausted - and funding for recuperation did not eventuate. The third factor was agitation at both national and state level towards an increase in status for the professional sector of technical education.

The years 1963-1964 were selected to separate this and the following chapter as the change in leadership and political support, brought with it a dramatic transformation in leadership style, and vital funding.

The period covered by Chapter Five, 1964-1977, saw dramatic, and for some people directly involved, even frightening changes in Queensland technical education. Many of these changes had spectacular long-term repercussions on the whole structure of post-secondary education. Technical Education was divided in two and the professional sector transformed into a new tertiary education sector. The remains of Technical Education then amalgamated in 1977 with Adult Education.

Eight Appendices are included to clarify and expand on the relevant aspects of the study. Appendix One presents details on the Premiers of Queensland, Ministers for Education and some other politicians mentioned in the text; Appendix Two presents details on some 'main-players' who were not politicians; Appendix Three lists the members of selected Boards and Committees mentioned in the text; Appendix Four reprints the Brisbane Technical College Incorporation Act of 1898; Appendix Five reprints the Technical Instruction Acts of 1908 and 1918; Appendix Six is a graph of Technical Education centres from 1882 to 1977, showing when they opened and/or closed, and when they changed their status; Appendix Seven is a graph showing in chronological sequence, the occupiers of the positions of Premier, Minister for Education, Director-General of Education, and Director of Technical Education. It also shows when each party was in power. Finally, Appendix Eight is a chronology of selected events.

CHAPTER ONE

GENESIS 1870-1898

Introduction

Technical Education has never been peculiar to Queensland or even Australia. The transference of technical knowledge has always been associated with human enterprise and survival. Although technical education in Australia, as a formal educational system, can trace its roots directly back to the English Mechanics' Institutes and Schools of Arts, throughout the world technical education itself has had a much longer but not always documented ancestry.

Creating fire in the caves, forging weapons, designing, building and maintaining great siege engines through the ages, making and repairing clothing, erecting shelters – from the lean-to of the native to the massive castles of England and Germany, designing and constructing marine vessels – from the bark canoe to the huge Phoenician fighting ships, growing and harvesting crops – these skills were handed on from father to son, mother to daughter, craftsman to apprentice, expert to beginner, specialist to assistant.

Along with manual dexterity was a need for theory - an understanding of why such things happened. Fire needed an understanding of friction; weapons needed an understanding of metallurgy; siege engines needed an understanding of springs, reaction and counteraction; clothing needed an understanding of flexible materials;

consider the 'stone thrower' used by Alexander the Great from 356 BC to 323 BC as described in N. Sekunda, *Hellenistic Warfare*, Hackett, 1989, p.131.

shelter needed an understanding of bracing to resist forces of nature; bark canoes needed an understanding of trees and attributes of bark.

This chapter discusses the genesis of Queensland technical education. It argues that there was no formal system of technical education before 1889. It discusses how training evolved through the ages - from the passing-on of family traditions to more formal systems. The Mechanics' Institute and School of Arts movements arrived in Australia with British migrants and served the same functions as they had in England. Technical education became an manifest expression of the secular liberal faith in progress but early Australian technologies were such that they did not need Technical Education however, and therefore there was no early demand for it. Eventually formal technical classes were established and North Brisbane School of Arts expanded as a result, and from this came Queensland's first technical college.

The first thirty years of the drive for technical education are then examined as is the affect of the 1890s depression. Technical Education slowly gained strength however, and this process, the problems of Brisbane Technical College, and the resultant *Brisbane Technical College Incorporation Act of 1898* are discussed. The chapter then closes with a summary and reiteration of critical points followed by an analysis of the development of Queensland technical education during the period.

Before 1870

Before the 8th century BC, the Greek City-State of Athens had an informal system of apprenticeship as preparation for vocation. After the 6th and 5th centuries BC, more skilled labourers were needed and the informal apprenticeship system became less informal as training moved out of the family environment, the worker was examined by the teacher and this approval was proof of skill. The Athenian system of occupational training appeared later in the Roman nation in a semi-formal pattern. It was skill training for lower classes enabling them to become craftspeople and was done through an apprenticeship. This 'Roman' form of craft training survived through the

Middle Ages, particularly in Germany, where skills and technical arts were inherited through the Monasteries.²

Guild Education

From this base, the Guild system of the 12th and 13th centuries, and even the later Middle Ages, emerged. These were most commonly mutual aid and protection organisations formed by people with common trade or industry interests. A systematic foundation for training guildsmen developed, and trade training developed into three stages similar to that of knighthood. These three stages were apprentice – page, journeyman – squire, and master craftsman – knight. As an apprentice, a youth would be assigned or bound over to a master craftsman based on some type of contract or indenture binding on both parties. Indenture duration could be from three to eleven years and the apprentice might have started at seven or eight years of age.³

Other Vocational Training

During later periods there was some emphasis in trying to give minimal vocational training to the masses, particularly if families were extremely poor. Martin Luther (1483-1546) stressed the importance of teaching all children a trade but indicated it should be done in the home. In the Netherlands, considerable attention was given to commercial and trade education and from 1531, legislation required young men either to attend school or be apprenticed. Municipal authorities were directed to establish vocational training schools almost a century before similar laws in the USA. During this time vocational education obtained its most effective start, although it was

R.F. Butts, A Cultural History of Western Education: Its Social and Intellectual Foundations, (Second Edition), New York, McGraw-Hill, 1955, p.44.; R.L. Pounds, The Development of Education in Western Culture, New York, Appleton-Century-Crofts, 1968, p.69.

³ E.P. Cubberley, The History of Education: Educational practice and Progress considered as a Phase of the Development and Spread of Western Civilisation, Cambridge, Mass., The Riverside Press, 1920, p.797.; Pounds, loc. cit.

far from being widespread or completely effective, in those countries which had the most commercial interests – Germany, Netherlands and England.⁴

During the Elizabethan period (1558-1603), the English poor laws provided compulsory apprenticeships and work houses for poor children. These were not prisons but places to train people to work. In the 17th century some Puritan reformers tried to get more vocational education into private academies but were generally unsuccessful as the emphasis then was on classical education. In England during the 18th and 19th centuries, an industrial society developed, and some vocational subjects began to appear in schools.

The Industrial Revolution

The Industrial Revolution fostered an interest in mathematics, science, drawing and engineering. The invention and use of steam driven machinery increased the importance of learning mechanically related topics. Simultaneously the doctrines of the French Revolution (1789-1799) caused the working classes to demand new educational opportunities. Artz says that, in France, before the 18th century, technical education arose haphazardly from two distinctly different areas.

... First, there was the idea of teaching children through direct contact with things and situations; this the educational reformers often called learning by doing. Second, it proceeded from the practical needs of a system of scientific training – one more effective than the apprentice system – to enable men to handle effectively the new mechanical equipment [for the military] . . . 5

⁴ Pounds, op. cit., p.153.

⁵ H.C. Barnard, A Short History of English Education from 1760 to 1944, London, University of London Press, 1947, p.104.; F.B. Artz, The Development of Technical Education in France 1500-1850, Cambridge, Massachusetts, The M.I.T. Press, 1966, p.109-110.

The Mechanics' Institutes

About 1800, George Birkbeck⁶ started a course of lectures and experiments in mechanics solely for local tradespeople

... engaged in the practical exercise of the mechanical arts, men whose situation in early life has precluded the possibility of acquiring even the smallest potion of scientific knowledge.⁷

In 1823 some of Birkbeck's students organised a *Mechanics' Institute* with the purpose of '... instructing artisans in the scientific principles ...' Mechanics' Institutes soon appeared in many parts of England, Scotland and Wales. By 1850 there were more than 600 such institutions with in excess of 100,000 members. Each Mechanics' Institute usually included a library, reading-room, and a museum of models and apparatus. There were usually lectures on mathematics and its applications, and on natural and experimental science and drawing.⁸

Mechanics' Institutes played an important part in English education and yet were only partially successful. By 1850, more white-collar workers (clerks, apprentices and middle-class people) than blue-collar workers (working class people) for whom they were intended, were members, and syllabi began to correspond. Some became 'clubs' rather then learning centres while others however, retained their original character and, later in the 19th century, were stimulated into new life by the development of technical education. In the broadest sense, the Mechanics' Institutes laid foundations for the development of today's technical institutions. In most parts of Australia, a similar sequence of growth occurred. Queensland however, tended to start with the 'club' institution model – the School of Arts – instead of the 'Institute' model. Over the subsequent two to three decades nevertheless, the 'clubs' altered their emphasis as members' needs changed and began to offer 'institute' style technical lectures and classes.9

^{6 1776-1841,} chair of natural philosophy at Glasgow University.

⁷ Barnard, loc. cit.

⁸ C.D. Burns, A Short History of Birkbeck College, London, A. & U., 1924, Chapter i.; J.W. Hudson, The History of Adult Education, London, Woburn Books Ltd, pp.222-236.

⁹ Hudson, op. cit., p.52.; In Queensland a 'School of Arts' was generally a hall for working people to study and attend educational lectures. At a minimal level there was a stock of reference books similar to an amateur library.

Knowledge for Its Own Sake

During the 1870s, a distinct and new drift towards associating scientific and technical education with the formal education system became unmistakable. Its leading champions, such as Charles Lilley and John Douglas¹⁰, fused the older arguments of the 1850s – knowledge for its own sake and as a source of social and moral benefit – with a new utilitarian argument for technical education of the working class. It could be argued that this was a response to the needs of a society undergoing the initial stages of industrialisation and urbanisation and therefore be defended on pragmatic functional grounds. In reality however, it was an expression of the secular liberal faith in progress – and education was a vital ingredient. What could be more natural for the late 19th century – the age of industrial maturation – than attempting to connect technical and scientific learning to formal systems of education?

The main impulse for the mechanics' institute movement was derived from middle-class views and desire for a harmonious society. The essence of these thoughts was that, within the confines of their fixed social status, the working classes should be given scope and encouragement towards their self-improvement. In industrial middle-class England this intellectual advancement of the masses was thought best achieved by developing appreciation of practical applications of specialised science. These middle-class enthusiasts placed great value on useful forms of knowledge but certainly did not intend to offer specialised technical training. In non-industrial Australia however, manual workers were in a strong position as a shortage of labour had minimised differences between the unskilled and the skilled for whom the institutes were intended. Nevertheless, middle-class ideals were deemed well served if enlightenment and appreciation of social harmony could be generated among the masses.

Formal Technical Classes Established

Until 1881, technical education classes in Queensland had been unsuccessful, but this situation was soon to change. Early that year Joseph Augustus Clarke¹¹, stressing that Brisbane and other places greatly needed drawing, asked North Brisbane School of Arts for space to teach the subject. Night classes began on 1 April 1881 in the Servant Building in Ann Street. Clarke, with an assistant, Christian Waagepetersen conducted two classes a week with an initial twenty-two students. Mechanical art and freehand drawing were taught and the classes were an immediate success.¹²

The initial students appeared to come from those social and vocational groups for whom the classes were designed. According to Clarke these represented such diverse fields as architecture, carpentry, shipbuilding, surveying, photography and engineering, gold and silver work, and decorative painting. They were generally apprentices, or youths wishing to gain an apprenticeship, and men wanting to improve their knowledge and skills in their vocation. According to one newspaper, North Brisbane School of Arts was striving

. . . to provide instruction of a practical nature such as has some bearing on the arts of life by which a livelihood is gained, and it is the desire that it shall be available to all concerned.¹³

A women's class was added and some students studied watercolour painting, and decorative work on silk and satin. The classes were so successful that other subjects were added. Both Seibert and McKeering comment that this may be the first recorded instance of formal art education in Queensland.¹⁴

Four months later, when reporting on their success, Clarke and Waagepetersen stressed the need for a suitable building. Douglas, the President, felt that if the old funding scheme (£1-for-£1) could be restored and if they could build two classrooms and a lecture room, technical education would be further encouraged. Later that year a Mr Baxendell started a mathematics class. The success of these technical classes plus

see Appendix 2 - Details on Other Selected People.

¹² *Brisbane Courier*, 22 July 1881, p.3; Brisbane School of Arts, Minute Book 1874-1882, meeting of 10 March 1881, A/16275, *QSA*.

¹³ Queenslander, 16 July 1881, p.84.

J.A. Clarke and C. Waagepetersen, 'Report on classes', in *Brisbane Courier*, 22 July 1881, p.3.; D. Seibert, 'Queensland College of Art - entering a new era', in *Griffith Gazette*, 6:2:March 6 1991, p.11.; B. McKeering, *History of South Brisbane College of Technical and Further Education*, Brisbane, Boolarong Publications, 1988, p.5.

the reality that the allocated space was neither suitable nor practicable led John Sinclair¹⁵ to approach Sir Arthur Palmer¹⁶ for a grant of £1,000 for technical classes at North Brisbane School of Arts.¹⁷

North Brisbane School of Arts Expands

At this point it is worth noting the close relationships between North Brisbane School of Arts and leading figures of Queensland society. Sir Charles Lilley was Chief Justice and had been Premier; Sir Samuel Griffith was a Queens Counsel and was to be Premier in the future; Sir Arthur Palmer had been Premier and was Minister for Education; J.F. Garrick was a Queens Counsel and had long been associated with the institution; John Douglas, institution president, had recently been Premier; John Petrie was institution vice-president; Thomas McIlwraith¹⁸ was Premier; and John Sinclair was Mayor of Brisbane. All were members of the general committee, so manifestly there were several political, legal and social heavyweights identifying with North Brisbane School of Arts.

In August 1882 representatives of North Brisbane School of Arts visited Archibald Archer¹⁹. John Douglas stressed the School of Art's intention to provide a School of Design that '... would prove most useful to the rising generation ...', while John Sinclair strongly advocated the teaching of agricultural chemistry.²⁰ Archer strongly welcomed the proposal provided any grant was solely for technical education. Following this favourable hearing Douglas wrote to McIlwraith, the

general committee member and Mayor of Brisbane.

Minister for Education 1879-1881.; see also Appendix 1 - Details on Selected Politicians.

Brisbane School of Arts, Annual General Meeting, 1881, QSA.; Brisbane Courier, 26 September 1881, p.3.

a trained engineer who had recently lectured on his profession at North Brisbane School of Arts.

¹⁹ Minister for Education 1882-1883.; see also Appendix 1 - Details on Selected Politicians.

²⁰ Brisbane Courier, 26 September 1881, p.3.

Premier. He pointed out that for some nine months regular classes had been conducted, that some forty students were regularly attending, and that help was needed to establish a 'School of Design and Technical Training'.²¹

Further negotiations resulted in a government guaranteed subsidy. It was hoped this would be recurrent if North Brisbane School of Arts managed to construct a technical school. At this point it was decided to promote the issue through a series of lectures by prominent people in the Albert Hall. In his own lecture, Douglas stressed that '... our sphere of work ought to be ... chiefly with mechanics, [but] we do not intend to shut out anyone who is willing to be taught ...'²²

Following these promotions a public meeting was convened in the Town Hall to determine public support. There was support for North Brisbane School of Arts and a resolve to establish a technical school. Lilley appealed for wide social support by asserting that a technical school '... would not raise any class dissensions.' He maintained that the object of technical education was twofold; to improve the general knowledge of tradespeople, and to educate them in advanced aspects of their trade, consequently making them more useful to employers. 'I do not wish to make men discontented,' he is reported as saying. 'Far from it, I believe much in the dignity of the honest faithful working men.' As Murray-Smith says, Lilley's comments portray that some sectors of society were obviously suspicious of the radical undertones of technical education, while others were suspicious that it offered charity to the working classes. The middle and upper classes were insistent that the need for technical education should be more clearly defined before any development should proceed.²³

Notwithstanding, and most importantly, the government support essential for development of systematic Queensland technical education was won due to three major arguments. The first was appeal to precedent – Sydney already had a University therefore Brisbane should have more than a sprinkling of Grammar and State primary schools. The second was the significance of the development of technical education in Sydney and overseas. Almost '... every city of any importance in Europe, America, and the other Australian Colonies ...', (but not Brisbane), were educating their people in daily work skills. The extension of this was that the community should be alarmed at French, American and other grasping imperialists making inroads on Queensland's

Technical Education, Letter of 20 February 1882, A/16275, QSA.

²² Brisbane Courier, 7 July 1882, p.7.; 21 July 1882, p.2.

²³ Brisbane Courier, 5 August 1882, p.5.; 14 August 1882, p.3.; 15 August 1882, p.3.; S. Murray-Smith, A History of Technical Education in Australia with special reference to the period prior to 1914, PhD. Thesis, University of Melbourne, 1966, p.556.

best markets. Queenslanders were meant to deduce that these problems were a direct result of a lack of skilled labour brought on by a deficiency in technical education. It was said that German and French workers were superior to English workers and that this situation arose as a direct result of France and Germany adopting technical education. The third argument was evidence of local need. Driven by a flood of immigrant capital, the building industry was expanding rapidly, and both mining and sugar industries were seeing the application of many new technologies. Besides all these, speculation was rife with the country seeing itself as entering an era of great promise. As one newspaper put it, a few hundred pounds spent on providing technical learning '... will return to the community a hundredfold in the good which will follow.'24

That public meeting in the Town Hall duly selected a provisional subcommittee. It consisted of a Chief Justice, five members of parliament, the City Mayor, two doctors, two Queens Counsels, the Government Printer, the Parliamentary Clerk, a commercial printer, a lithographer, three coach-builders, a silversmith, a bootmaker, two cabinetmakers, three engineers, five businesspeople whose businesses were unspecified, a boot factory manager, and (almost as a sop to the workers whom Lilley had envisaged as the 'clients' of this new 'Technical Education') a draftsman and three other employees from one company, and five foremen – all from the same foundry. Forty people were on this committee and only nine were 'workers'! As Cleary succinctly puts it '... the technical education movement was still dominated by prestigious middle class figures.'25

This subcommittee launched a public appeal, seeking funds for a building and equipment, and despite vigorous attempts to raise money from commercial interests, only 10% was raised – ¼ of which came personally from Thomas McIlwraith. As Murray-Smith comments this was '. . . further evidence that the issue was still one of intellectual conviction rather than necessity.'

Meanwhile technical classes were now using all available space and had even overflowed into a nearby Works Department building. By the end of 1882 there were nine teachers instructing approximately eighty students in many subjects. In the

²⁴ Observer, 11 March 1882, p.9.

²⁵ Brisbane Courier, 15 August 1882, p.3.; J.T. Cleary, The North Brisbane School of Arts, 1849-1899. Bachelor's Thesis, U of Q, 1967, p.201.

Douglas visited several large workshops in an attempt to create interest.; Murray-Smith, op. cit., p.558.

following April, Richard Bailey²⁷ submitted plans for a new technical building. It was eventually opened by the Governor, Sir Anthony Musgrave on 18 July 1884.²⁸

The technical activities from August 1882 (when a technical subcommittee was formed) until 1889 can be considered as the first steps in the development of Brisbane Technical College. But technical classes were only one activity of North Brisbane School of Arts. Indeed they were held within the School of Arts confines, but were distinguishable from the traditional School of Arts classes as, helped by the supposed annual government grant, classes were more numerous and more successful. During this period the number of technical classes increased as did the number of students.²⁹

During this period, Dudley Eglinton³⁰ supervised technical classes but only as one of his many duties. Nobody was formally 'in charge', and these eight years were distinguished by nonchalant attitudes and lack of any systematic plan. 'Don't let us begin with an ideal curriculum intended for an ideal "working man" advised Clarke, 'Teach anything or everything for which you can get competent teachers and willing pupils . . . but first catch your pupils and catch them young.'³¹

From 1883 to 1889 the subjects offered varied greatly. The most popular tended to fall into three categories – drawing, elementary education, and commerce. Apart from a carpentry class started in 1885, no trade subject emerged, and not until the end of the decade were there any regular enrolments in 'industrial' subjects such as chemistry or building construction. Nevertheless, the upsurge for non-systematic technical instruction in the 1880s was reflected in enrolment growth, and the range of technical classes gradually expanded albeit indiscriminately.³²

architect and North Brisbane School of Arts member.

Brisbane School of Arts, Sub-Committee Meeting, 26 April 1883, 30 July 1884, QSA.; G. Logan and E. Clarke, (eds.), State Education in Queensland: A Brief History. Monographs on the History of Queensland No. 2, Brisbane, Department of Education, 1984, p.10.; H. Holthouse, Looking Back: 150 years of Queensland schools, Brisbane, Department of Education, 1975, p.94.; Brisbane Courier, 16 January 1885, p.5.; D.R. McConnel, to the Minister for Education, 'An Account of the condition of the Technical College' 1 March 1890, 'Technical Education', QSA.; Brisbane Technical College, Calendar 1899, p.127-128, QSA.

²⁹ Brisbane Courier, 28 January 1887, p.6.

³⁰ North Brisbane School of Arts secretary.

³¹ Brisbane Courier, 14 August 1882. p.3.

Reports of the Technical School from 1883 to 1890 are to be found in QPP from 1884 to 1891.

The First Technical College

Technical classes continued and slowly expanded in an erratic and arbitrary manner until, in July 1889, recognition that some control was needed was reflected in the decision that

... in consequence of the increased clerical and other work connected with the [technical] classes ... all the business and finance ... be kept distinct from the Literary section of the School of Arts.³³

On 11 September 1889 technical classes were separated from the School of Arts and, as a distinct entity, called Brisbane Technical College with D.R. McConnel³⁴ as Principal. North Brisbane School of Arts had finally admitted that some rationalisation was needed, and acknowledged that its efforts had been '... directed almost entirely to providing instruction of the most general character [for the] genuine culture of youths and apprentices ...', and that it wished to lay the foundations for a future system of industrial education. Systematic technical education in Queensland can be said to have commenced on that date, as from then Brisbane had a Technical College.

North Brisbane School of Arts recommended that an integrated, vocationally oriented system of technical education be established and that technical classes come under the direct control of the Education Department. The government persistently ignored these recommendations. Nevertheless, attendance at technical classes certainly must have improved the cultural and career opportunities of some individuals, but industry (at whom the school was supposedly initially aimed) was not interested. This was emphasised by a circular to all leading workshops in Brisbane seeking students for a class in applied mechanics – and not one person enrolled.³⁵

By 1890 other technical colleges had been opened at Bundaberg, Maryborough, Rockhampton, Toowoomba, and Townsville. In all instances, they were established by a local School of Arts.

Report of Annual Meeting of the School of Arts (25 July 1889) in *Brisbane Courier*, 29 July 1889, p.4.

see Appendix 2 - Details on Other Selected People.

R. Lawson, Brisbane in the 1890s, A Study of an Australian Urban Society, Brisbane, U of Q Press, 1973, p.173.; Brisbane Courier, 29 July 1889, p.4.; QPP, Vol.3, 'Technical classes, Brisbane School of Arts', 1887, p.2.; QPP, Vol.3, 'Technical classes, Brisbane School of Arts', 1888, p.1.; Brisbane Courier, 16 January 1885, p.5.

The Drive for Technical Education

Besides the basic requirements of food and shelter, the earliest European settlers in the colony of New South Wales urgently needed other supplies. These, including such staples as salt, candles, soap, leather for boots, saddles and harnesses, woollen cloth, bricks, mortar and timber for building, earthenware for containers, wine, beer and spirits, and tobacco, were supplied from England. The quantities however, were less than needed. Local augmentation was essential. British 18th century technology had well tried methods for making or preparing all these, and the first stage of industrial activity in the colony consisted essentially of applying and modifying this imported technology.

In the earliest period power was supplied by convict labour, then by draught animals which were comparatively numerous by the beginning of the 19th century. Later, wind and water mills were built wherever topographically appropriate. Steam technology had been part of the 18th century British industrial scene, but large scale application in the colony was delayed for some years by lack of capital, lack of supporting facilities and, until 1841, the availability of a cheap human labour force.

During the goldrushes of the 1850s however, the country's population almost trebled. As immigrants continued to arrive in their tens of thousands, the number of settlements in the eastern colonies increased rapidly. People became more mobile but roads were poor and sometimes nonexistent. Transport was slow, uncomfortable, hazardous, and expensive. Something better, faster and cheaper was needed to convey people and goods from place to place, and to deliver the wool, grain and livestock from the country to the cities. These problems caused a burst of railway building from 1850 to 1920 as the colonies began solving their problems of vast distances.

Previously, circumstances had resulted in a lack of demand for technology, and naturally almost no demand at all for any form of technical education. The changes of the 1850s however, caused a need to support and maintain the new technologies, but this small demand was generally satisfied by imported skills.

During Queensland's first twenty years, formal post-primary education was offered almost exclusively by expensive grammar schools. Nevertheless, there were still individuals who saw education as a tool to aid upwards social mobility. Middle-class liberals such as Lilley, Douglas and Griffith encouraged these education-aspiring

attitudes. Douglas believed in the holistic approach to education. He supported knowledge for its own sake and as a source of social and moral benefit. He firmly believed there should be technical education offering, not just training for apprentices, technicians and professionals, but a broad general education. Lilley urged his audience that North Brisbane School of Arts should be used to teach arts and sciences. He believed that such educational opportunities would lead to greater industrial efficiency and productivity and help individual careers.³⁶

In the 1870s

Although the 1870s saw growth of a social movement toward technical education, with support for scientific learning emerging within North Brisbane School of Arts, its time was not ready. People such as Lilley and Douglas may have had differing objectives, but there was firm agreement on the mechanisms essential to the development of such an educational system. This support slowly expanded and industrial growth and commercial expansion within the State, and the collective needs of individuals wishing to improve themselves, created a need, but not the means, for some form of technical education.

In the 1880s

The society of the 1880s failed to see a need for systematic technical education. The foundation cause of this was economic and not social. This was a decade of astonishing development and dramatic economic growth. The colony's population doubled, its railways almost trebled in length, there was a dramatic expansion in sugar, gold-mining and public works, and factory employment more than doubled, but most of this development and growth occurred outside Brisbane.³⁷

Queensland was very decentralised. Its major industry was gold mining, almost all of which was a long way from Brisbane. Heavy industry was centred in

³⁶ Logan and Clarke, loc. cit.

N.G. Butlin, Australian domestic product, investment and foreign borrowing 1861-1938/39, Cambridge, University of Cambridge Press, 1962, p.162.

Toowoomba around the Foundry, in Maryborough around Walkers Engineering, and in Ipswich around the large railway workshops. Rockhampton was the main export centre while Brisbane had mainly service and light industries.

The industrial situation was only part of the economic situation with the determining element being the population itself. Migration to Queensland became a torrent in the 1880s. Social and political idealism, an acute shortage of labour throughout the colony – except in Brisbane – and a vigorous promotional campaign throughout England, Ireland, Scotland and Wales resulted in a population increase of 84%. At least 5,000 of these 112,000 new Queenslanders were skilled workers – carpenters, builders, blacksmiths and metal workers – but they stayed in Brisbane where their labour was less needed. Despite the increase in jobs resulting from this population growth, the labour market was quickly saturated and unemployment rose. Technical education therefore, was almost the last thing on the minds of most Queenslanders in the 1880s.³⁸

In the 1890s

Before 1891, technical education was far from being an explicit or even structured system of education. Any technical skills needed by earlier Australian technologies were generally satisfied by imported skills or by 'on-the-job' training. There had been therefore, limited demand for the skills training a system of technical education could supply.

Although Brisbane unionists publicly supported technical education, submissions to the 1891 Shops, Factories and Workshops Royal Commission showed that Brisbane industry had minimal interest in traditional apprenticeships and that there was little demand for industrial training. The Government Printer summed up the attitude of most employers when he submitted that there were '. . . already enough compositors and machinists in the colony without making more.'³⁹

R. Lawson, Immigration into Queensland 1870-1890, B.A.Honours Thesis, U of Q, 1963, p.i.

³⁹ QPP, Vol.2, Report of the Royal Commission into the shops, factories and workshops in the colony, 1891, pp.p.xxii, xxxiii.; Report of the fifth intercolonial trades union congress, Brisbane, 1888, pp.80-82, 91-94.

There were still those in power however, who determinedly withstood any advances technical education may have tried to make. David Ewart⁴⁰ said

Recollections of my own boyhood, and the experiences of many years since, have shown me that an apt boy will acquire a fair technical education and learn many things if he is given a few tools and the run of the backyard.⁴¹

As Wyeth comments 'So much for technical education.' Indeed, so much for any form of education under Ewart. He really alienated his state school teachers when he described them as

... worthy and respectable men and women, of moderate capacity, of small opportunities, of limited attainments and of humble ambitions, who do for little and do fairly well a large amount of elementary educational work . . . which must always be drudgery, . . . 42

But despite the opinions of Ewart and others, there was mounting evidence of public support for technical education. In late 1891, a Brisbane Technical College deputation to the Minister of Education was supported by many professional and craft unions, institutes, associations and societies.⁴³

The 1890s also saw a surge to open centres offering 'technical classes'. Between 1891 and 1898, ten technical colleges were opened, as well as a School of Mines. In addition South Brisbane Mechanics' Institute was renamed as South Brisbane Technical College, but two of the new colleges were soon closed.⁴⁴

While the commercial, financial, and government sectors of the economy grew despite the depression, the industrial sector expanded even more rapidly. It had now become clear that Queensland's educational system was producing insufficient trained people for Queensland's industries. During the 1890s few youth wished to learn a trade, and those who did were not being properly trained because of breakdown in the

Director of General Education 1878-1904; see also Appendix 2 - Details on Other Selected People.

^{41 17&}lt;sup>th</sup> RPQ for 1892, p.22.

⁴² E.R. Wyeth, ?1953, Education in Queensland. A History of Education in Queensland and in the Moreton Bay District of New South Wales, ACER Series No.67, Melbourne, ACER, ?1953, p.151.; 20th RPQ for 1895, p.22.

Letter to the Minister for Education, 14 October 1891, *Technical Education, QSA*.; D.R. McConnel, report to half-yearly meeting of the Brisbane School of Arts, 9th session, 1892. *Brisbane Technical College papers, JOL*.

G. Greenwood and J. Laverty, *Brisbane 1859-1959 - a History of Local Government*, Sydney, O.L. Ziegler (for Brisbane City Council), 1959, p.429.; McKeering, op. cit., p.13.; 7th-14th RPQ for 1882-1889, Table K in each, varies between pp.33-59 depending on year.; see also Appendix 6 - Graph of Centres of Technical Education.

apprenticeship system. Moreover, it was obvious that industry growth would also require more highly qualified personnel, people with advanced technical training in science and engineering.

Consequently, the non-practical bias of the state education curriculum came under heavy attack, and there were frequent demands for the introduction of manual arts at primary level and for its integration with post-primary courses at technical colleges. By the end of the 1890s Technical Education had been recognised and had arisen, in a decentralised fashion, throughout the colony.

The 1890s Depression

Almost at the same instant as the drive for technical education started to gain momentum, funding was cut dramatically. The economic boom of the 1880s, with seemingly unending prosperity and abounding confidence suddenly dissolved into a horrific depression. Between 1891 and 1895 banks crashed, production fell by 30%, and employment and incomes dropped disastrously.

The depression caused the government in 1892 to check on the final destinations of its technical education subsidies. Some had been misused which angered the government and, seeking to economise in the financially stringent period, it altered the subsidy system. This decision particularly affected Brisbane Technical College which abandoned most of its science classes. Successive governments were not prepared to favour the college with extra funding and it was not until after the *Brisbane Technical College Incorporation Act of 1898*, were these classes reintroduced.

The worst period of this economic crash came in 1893 – a black year in the history of the colony. In January the Federal Bank failed and closed its doors. This started a run on deposits which reached panic proportions, and in April and May most banks collapsed. Out of twenty-eight commercial banks operating in Australia then, only nine opened continuously during the depression, the others suspended payment, either temporarily or permanently. On top of this, two extraordinary and widespread floods close together caused enormous losses. These were succeeded by a drought, which in turn was ended by more heavy flooding.

The obvious move by the government was to severely restrict subsidies – not only those for technical education. These restrictions caused both sponsors and users of technical education to re-evaluate their long-term intentions.

The Brisbane Technical College Incorporation Act of 1898

Although the 1890s in Australia saw a massive decrease in foreign investment and a terrible depression, in Queensland there had still been a vigorous increase in interest in technical education. Enrolments rose rapidly, Brisbane Technical College in particular became overcrowded, and by 1897 new accommodation was urgently needed for technical classes.

As early as 1890 Brisbane Technical College had recommended the government form a board to address technical education management throughout the colony. In 1892 changes to the government's subsidy system had forced Brisbane Technical College to abandon its science classes. Since then successive governments had refused to grant extra funding to the college as comparable finance would invariably and immediately be demanded for country colleges.

By 1895 McConnel was extremely bitter at the lack of funds for Brisbane Technical College and as late as 1898, he complained that

It is a scandal . . . no chemical, mathematical, or electrical laboratories; no opportunities for the students to test the principles given to them . . . No engineering shop, nor any practical trade work except carpentry and joinery. We have no practical science and no practical application of scientific principles to trades.⁴⁵

In all other respects however, he had much to be thankful for. Enrolments, through a resurgence of interest in education, had doubled in two years and for the first time government subsidies had exceeded £1,000. Helped by the interest of the Queensland Institute of Accountants the commercial department of the college was expanding, while females were crowding the domestic science department for '... systematic

instruction in . . . healthful and appropriate clothing, feeding and treatment of the body, and . . . daily management of the home. 46

Classes were booming, and the differing and almost universal responsibilities of the college were emphasised by many school teachers enrolling in drawing classes to enable them to teach the subject in their own state schools. In addition state schools in Brisbane were now depending on Brisbane Technical College for classes in manual training and cookery.⁴⁷

Despite the thoughtless regionalism from which Queensland suffered, country technical colleges started requesting copies of examinations from Brisbane Technical College. McConnel saw this as the beginning of the end of '. . . the present usage and conditions of technical education . . .' and hoped that it would result in '. . . some reasonable system of mutual support and common direction.'

College management however, had problems. Forced by a lack of space for burgeoning enrolments and insufficient funds to construct its own building, North Brisbane School of Arts examined the College's future and considered ways to adapt the 1894 School of Mines Act so Brisbane Technical College could be separated from North Brisbane School of Arts. Towards the end of 1896, a deputation to David Dalrymple⁴⁹ pressed the urgency of their accommodation problem, and the need to separate the two institutions, and was sympathetically received. Additionally, they asked for the college to be treated as part of the state education system, as the agricultural college was, so that the government would supply new buildings rather than merely subsidise them. But the government refused the full request and the college was forced to move across the street to rented premises.⁵⁰

In 1897, the State Education Act Amendment Act extended the curriculum for older children in state schools, and Brisbane state schools became dependent on Brisbane Technical College for manual training and cookery classes. Brisbane Technical College was clearly benefiting from this resurgence of interest in post-

Report of the Brisbane School of Arts and Technical College, 1895-1896, p.2.

⁴⁷ Report of Brisbane Technical College sub-committee, 19 December 1896, Brisbane Technical College papers, *JOL.*; *Brisbane Courier*, 17 September 1897, p.2.

Address at Annual Awards of Brisbane Technical College, 12 March 1897, in Report of the Brisbane School of Arts and Technical College, 1896, *Brisbane Technical College papers*, JOL.

⁴⁹ Minister for Education, 1895-1899, 1902-1903; see also Appendix 1 - Details on Selected Politicians.

⁵⁰ Brisbane Courier, 3 September 1896, p.7.; 17 September 1897, p.2.

primary education, and more significantly from a lack of competition in satisfying the different career ambitions now surfacing among sections of the urban population.

The Government continued to be strongly pressured by its own members on the Technical College Committee, and shortly after decided that 'technical education' was the reason for Germany enjoying industrial and trade success at Great Britain's expense. In the name of national efficiency and self-survival⁵¹, legislation, based largely on that which set up the School of Mines in Adelaide, was prepared and passed despite objections from country members.

The *Brisbane Technical College Incorporation Act of 1898*⁵² established a College Council. As almost their first act, this Council reintroduced science classes. It was not until after this Act was passed, that Brisbane Technical College could supply the very training which those who considered technical education as most important, had been urging.⁵³

Summary

This chapter discussed the genesis of Queensland technical education. It argued that there was no formal system of technical education before 1889. It discussed how training evolved through the ages - from the passing-on of family traditions to more formal systems. It explained that the Mechanics' Institute and School of Arts movements arrived in Australia with British migrants and served the same functions as they had in England. Technical education became an manifest expression of the secular liberal faith in progress but early Australian technologies were such that they

whether it was self-survival of the politicians or self-survival of the country was not stated.

see Appendix 4 - The Brisbane Technical College Incorporation Act of 1898.

The Act supposedly separated the two institutions in all respects, but the Education Department was slow to recognise this – the 1903 Report of the Minister for Education shows technical education funding for the School of Arts and not the Technical College.; 24th RPQ for 1899, p.6.; P.E. Hunter, *The Brisbane School of Arts Centenary 1849-1949*, Brisbane, not stated, ?1950, p.37.; Seibert, op. cit., p.11, claims that both separation and relocation occurred in 1902. Physical relocation occurred in 1898, administrative separation occurred in November 1899, but actual financial separation did not occur before 1903 as seen in 28th RPQ for 1903, p.47.

did not need Technical Education however, and therefore there was no early demand for it. Eventually formal technical classes were established and North Brisbane School of Arts expanded as a result, and from this came Queensland's first technical college. The first thirty years of the drive for technical education were examined as was the affect of the 1890s depression. Technical Education slowly gained strength however, and this process, the problems of Brisbane Technical College, and the resultant Brisbane Technical College Incorporation Act of 1898 were then discussed.

The history of technical education in Queensland before 1898 is essentially a study of middle-class desire for social harmony. During the 19th century there were moves throughout the Australian colonies to provide enlightenment for the adults of the working classes. This was aided by the English Mechanics' Institute and School of Arts movements which had been imported. The first Mechanics' Institute was opened in Hobart in 1827 and both movements slowly spread throughout the colonies. During the 1870s, however, a distinct and new trend towards associating scientific education and technical education with formal education systems started to emerge. This trend was supported by the School of Arts movement in Queensland where it was more popular than were Mechanics' Institutes.

In Queensland, the leading champions of this new trend took the arguments of the 1850s – knowledge for its own sake and as a source of social and moral benefit, and fused it with a new utilitarian argument for technical education of the working class. It could be argued that this was a response to the needs of a society undergoing the initial stages of industrialisation and urbanisation and could therefore be defended on pragmatic functional grounds. But the reality was that it was an expression of the secular liberal faith in progress. The late 19th century was the age of industrial maturation and education was vital to that process. People like Charles Lilley and John Douglas saw it as natural that technical and scientific learning should be connected to formal systems of education. Before the 1880s there was almost no formal education in Queensland beyond primary level except that offered by a few grammar schools. Nevertheless, through the School of Arts movement, during the previous decade a fascination with technical education had developed.

In the 1880s the economy expanded, labour was in generally high demand, and technical education was considered necessary for employment. The existence of this vocationally oriented work force, or even proven practical needs however, failed to establish a demand for technical education. The demand came from the conviction of some influential people that significant benefits would accrue to industry, society and individuals by the diffusion of technical knowledge.

Despite a few aborted attempts, formal technical education in Queensland had never succeeded before 1881, but this soon changed when Clarke, assisted by Waagepetersen (and later by Baxendell), started his classes at North Brisbane School of Arts on 1 April. These technical classes gained the interest of eminent politicians and community leaders who lobbied the government for support and appealed to the community. Government support was finally approved but the community was not interested.

The technical classes expanded until on 11 September 1889 they became a distinct entity, separate from North Brisbane School of Arts. The following decade was a stormy one for Brisbane Technical College. It lacked strong support for economic and not social reasons. Large numbers of migrants entered Queensland in the 1880s and caused much unemployment in the skilled areas – the Report of the Shops, Factories and Workshops Royal Commission in 1891 showed a lack of interest in traditional apprenticeships and no demand for any type of industrial training. The introduction of unions reinforced this lack of interest by creating 'closed shops'. The 1890s saw a massive decrease in foreign investment in Australia with the 1892 depression causing the government to reduce funding for technical classes.

Brisbane Technical College however, was operating in a vacuum. It received little more than token support from the government, from industry, from the labor movement, from the Education Department, or from the public. It had to seek students wherever it could find them to survive. It had an impressive growth but not a well structured one. And the contradiction was that, the more successful it was in catering for a miscellaneous multitude of community needs, the more it became threatened and criticised for its eclecticism.

But circumstances were such that the college was driven to supply popular continuation, domestic, commercial and hobby classes to underwrite its more 'proper' technical classes. Nevertheless, during the 1890s there was a strong upsurge in demand for technical education. This occurred despite the government persistently, and seemingly perversely, ignoring recommendations for an integrated vocationally-oriented system of technical education to be established and, for Brisbane Technical College to be directly controlled by the Education Department.

The end of the 1890s depression brought to many people a new enthusiasm to further their education and finally, to the government, a new if limited, awareness that they had educational responsibilities to the people of Queensland. This awareness came from electoral pressure with country people, jealous of the advantages of city life, demanding their share of government handouts.

By the end of the 1890s technical education had arisen, in a decentralised fashion, throughout the colony. After 1898, it became increasingly identified with the concept of national destiny, people as social units, and educational specialisation. Instead of being a vehicle for the idea of an harmonious society, it almost became a tool to insist that all should be skilled to suit particular societal needs. The motives were tangled but the result was a bolder and more prominent period for technical education than Queensland had ever seen.

Technical education had developed from being 'almost public entertainment' to a serious educational force. It had been recognised as one segment of a comprehensive education system. If the various technical institutions had intended to provide strictly technical education for Queenslanders, the supply proved to outstrip demand. The popular support which focused on general studies in the schools of arts and technical colleges meant these centres were working-class grammar schools in disguise. They mainly gave instruction in basic subjects to post-elementary levels.

Nevertheless, there were eminent people determinedly fighting for a systematic form of technical education linked to other forms of education, and eventually, the *Brisbane Technical College Incorporation Act of 1898* came into force on 1 January 1899 making Brisbane Technical College independent. This Act forced an attitudinal change towards Technical Education. The next chapter analyses this change.

CHAPTER TWO

METAMORPHOSIS 1899-1914

Introduction

On 1 January 1899, the *Brisbane Technical College Incorporation Act of 1898* took effect. This Act, passed despite objections from country parliamentarians, separated Brisbane Technical College from North Brisbane School of Arts and placed it in the hands of a college council.¹

After the depression of the 1890s, many people gained a new preoccupation in furthering their education, and the government was forced to recognise, if only in a limited manner, that they had educational responsibilities other than primary education. But this new interest in education also broke down Queensland's insularity, and caused an '... awareness of external challenges, the onset of dark visions ranging from local trade rivalries to international warfare.' 'Once,' said John Douglas², we disliked neighbours '... having learnt to regard nothing less than a mountain range as a suitable boundary for a sheep or cattle run.' 'Now,' he continued, 'the idea of our Australian isolation has vanished into thin air ...'³

The Education Department was slow to recognise the fact - its 1903 report showed technical education funding still going to the School of Arts and not the Technical College.; 24th RPQ for 1899, p.6.

² see Appendix 1 - Details on Selected Politicians.

S. Murray-Smith, A History of Technical Education in Australia with special reference to the period prior to 1914, PhD Thesis, University of Melbourne, 1966, p.578.; Brisbane Courier, 20 October 1896, p.6.

The motives were inordinately complex and confused but the decade saw a prominent period for education in Queensland. Most notably, in 1894, J.G. Anderson⁴ recommended liberalising the state school curriculum. He went as far as to say that manual training and technical education might be included on a discretionary basis. Thirteen years later, D.R. McConnel⁵ discounted this statement, claiming that Anderson had always '... hated technical education ...'

While the commercial, financial, and government sectors of the economy were growing and so creating white-collar occupations, the industrial sector was expanding even more rapidly. But obviously the education system was incapable of producing a trained workforce for Queensland's industries. It had been a common lament during the 1890s that few youth wished to gain a trade, and that those who did were improperly trained because of the breakdown in the apprenticeship system. Moreover, the growth of industry would also require a supply of more highly qualified personnel, people with advanced technical training in science and engineering. Consequently, the non-practical bias of the state education curriculum came under heavy attack during the late 1890s, and there were frequent demands for the introduction of manual arts at primary level and for its integration with post-primary courses at technical colleges.

This chapter takes technical education in Queensland from 1899 to 1914. In 1899, when the *Brisbane Technical College Incorporation Act of 1898* came into being, technical education in Queensland was a disjointed clutter of centres offering almost whatever the customers wanted. Together, they were masquerading as a pseudo technical educational system, but in reality, the centres were more akin to working-class grammar schools, as they mainly supplied instruction in basic subjects to post-elementary levels. After 1898, technical education became increasingly identified with the concept of national fortune, with people being seen as part of a social mass rather than as individuals, and educational specialisation. Instead of being a vehicle for achieving an homogeneous society, technical education was seen as means whereby everybody could be skilled to suit a particular societal niche, rather than the individual's wishes. After 1910, for a while it became a tool for Government to sway people's wishes.

⁴ Director-General of Education 1878-1904.

Principal, Brisbane Technical College.; see also Appendix 2 - Details on Other Selected People.

^{6 21}st RPQ for 1896, p.84.; Memorandum on 'Advantages of payment by Grant', 1907, Brisbane Technical College papers, *JOL*.

By 1914 the anti-liberal educational evolution had taken over, and from then on the needs of a modern industrial society dictated the path of education and, in particular, of technical education. But public response was fickle and the political will to plan an industrial economy and an educational system demanded by such an economy, fluctuated. Nevertheless, by 1914 political and official attitudinal changes had occurred, and technical education was a serious educational force. Governments, officialdom, and society now recognised it as one segment of a comprehensive educational system.

This chapter investigates this period of metamorphosis and begins by surveying technical college numbers which varied considerably during the period - from fifteen in 1898, to a peak of twenty-nine in 1901, down to seventeen in 1910. There is a detailed examination of the Board of Technical Education, why it was formed, the friction it caused, and its eventual demise. This is followed by an investigation of the development of a Technical Education Branch, the *Technical Instruction Act of 1908* and the creation and development of the 'new' Central Technical College. The beginnings of technical correspondence courses are considered followed by a discussion on the first State High Schools. There is some thought given to why funding for technical education remained static for a decade and then exploded in the ensuing five years. The chapter closes with a summary and reiteration of critical points followed by an analysis of the development of technical education in Queensland during the period.

Background

Before 1899, only seventeen centres had ever received government funding for 'technical' classes of some category, and of these, two had already had their funding rescinded. From 1899 to 1914 eighteen more centres received funding while sixteen centres lost it. The result was that during this period, the net number of funded centres increased only by two - from fifteen to seventeen.⁷

In 1901, the School of Mines in Charters Towers, managed by the Department of Mines, had enrolled 100 students. Although this was the first technical institution in

Queensland to offer a coordinated course of study for a specific vocation, it had been government funded since 1893 through the local School of Arts.

Except these technical classes in Charters Towers and those conducted at Brisbane Technical College, technical classes in Queensland in 1901 were not directly covered by any legislation or government regulations. Until that year they were not even the subject of government interest or concern. Yet the number of technical enrolments, and their directly associated funding, had expanded so much that the total State subsidy was a substantial budget item - it had risen to 3.6%. Between 1898 and 1901, the number of centres receiving funding for technical classes had increased from fifteen to twenty-nine - an astounding 93% increase.

This increase in funding for technical classes, and the economic pinch caused by drought engendered a stirring of concern within the government. This concern centred on subsidies for technical classes, with the government being particularly anxious to learn whether their funds were being improperly or carelessly spent.

By the end of 1914 all Australian States had virtually completed implementing new educational structures of which a dominant feature was the educational ladder. Access to secondary and higher education came through new examination systems, alteration of fee structures, and scholarships. Youth with academic ability could now extend their education, if their economic circumstances permitted. This 'ladder' was more strongly established in some States, notably New South Wales, than in others. This restructuring had qualified importance however, as demand for higher education was weak.

In Queensland the 'ladder' was not yet strongly established - indeed education in Queensland had been notable for its disparate systems. There was a state primary system which culminated in the 'Scholarship'. This public examination allowed a few fortunate members of the working-classes to migrate to one of the ten select Grammar schools, or to the three new state High Schools. There were also the Junior and Senior public examinations, designed as entrance examinations for the University. There was also the Technical Education system which consisted of a number of institutions, of which only three were under state control. However, as technical institutions did not offer Junior or Senior examinable subjects, the public regarded them as pointless and second-rate, and not suitable for their children. On the other hand industry and commerce saw them as useful. But in particular, education in Queensland had been notable for its discontinuity of political leadership; from 1899 to 1914 there were eight Premiers and eleven Ministers for Education. During that time the longest serving

Minister for Education was Andrew Henry Barlow (December 1899 to September 1903) in Robert Philp's government.⁸

Brisbane Technical College

On 1 January 1899, the *Brisbane Technical College Incorporation Act of 1898* took effect. This Act separated Brisbane Technical College from North Brisbane School of Arts and put it under the control of a college council. The council appointed McConnel as college Principal.⁹

A short time later the Education department offered State school teachers throughout the state free rail passes to their nearest technical college, allowing them, if they wished, to attend Saturday drawing classes. In June 1900 the education department arranged with Brisbane Technical College for a cookery course for twenty-four female State school students. The department paid the fees and in 1901 they expanded the scheme to allow eight students in each of six country towns to attend their local technical colleges. This nexus between the state education department and non-state technical colleges continued for many years.¹⁰

The Board of Technical Education

In 1899, the Education Department had neither authority nor influence over technical education, and had no desire to obtain either. By 1914 however, it had absolute control over technical education in the metropolitan area and in a few country areas, and restricted control of other colleges. The Department tried to use this period

⁸ see Appendix 1 - Details on Selected Politicians; see also Appendix 3 - Incumbents of Selected Relevant Positions.

^{9 24}th RPQ for 1899, p.6.; P.E. Hunter, *The Brisbane School of Arts Centenary* 1849-1949, Brisbane, not stated, ?1950, p.37.

^{10 25&}lt;sup>th</sup> RPQ for 1900, p.7.; These technical colleges were Bundaberg, Ipswich, Maryborough, Rockhampton, Townsville and Warwick; 26th RPQ for 1901, p.7.

of reorganisation to bring higher standards to technical education and to coordinate it with other branches of the educational system. The chaotic condition of technical education in Queensland at the start of the new century, the emphasis placed on technical education in southern states, pressure put on the government, and a Director of Technical Education being appointed, stimulated this activity.

Apart from some interest in local arrangements between state schools and technical colleges, and in funding destinations, once Brisbane Technical College was separated from North Brisbane School of Arts, the government had almost no other interest in technical education. Contrasting with this however, elements of the state school curriculum were partially dependent on technical college output and local education department inspectors therefore wanted access to the colleges. Due to this pressure, and to suspicion that not all funding destinations within some technical colleges were appropriate, in 1901 the Education Department decided to inspect all technical colleges.

The reports of inspection showed technical college funding being used in a variety of ways, of which some had far from optimal connections with technical education. There were many irregularities and defects in the operation of technical classes with funding often going to non-technical classes. Students seldom selected subjects towards a clear objective, and colleges failed to offer coordinated courses of study for a specific vocation. Further weaknesses reported were a lack of course organisation, and duplication of courses, teaching staff and equipment within the four metropolitan technical colleges. The report highlighted a lack of course uniformity between centres and a lack of standards for teacher appointment. Only Brisbane Technical College met inspection standards. These deficiencies seem to have resulted from a rapid increase in the number of technical colleges, a local misunderstanding of the purpose of technical education, and a complete absence of government supervision of technical education funding.¹¹

These reports caused the government to change its attitude towards technical education and it introduced new regulations. They reduced funding by 25% but soon reversed this decision however, when several politically powerful colleges remonstrated. Instead, public examinations and music lost funding completely while non-technical subjects lost half their funding. Government funds for technical

The four metropolitan technical colleges were Brisbane, South Brisbane, and West End Technical Colleges, and the Pharmacy College - it is interesting to note that the Pharmacy College, separated from Brisbane Technical College in 1902, was considered to be a Technical College at that time. Sandgate was not then in the Metropolitan area.; 26th RPQ for 1901, p.50.

education were to be used only for technical education, and specifically, none was to be used for Schools of Arts, or for Halls of Entertainment. Technical college committees were to keep distinctly separate accounts, to audit them annually, and to have them inspected by the new Board of Technical Education.

The government established the Board in September 1902 and appointed all members. Its function was generally to advise the Minister for Education, to make recommendations on existing technical colleges, and applications for new ones, to conduct examinations and to issue certificates to students.¹²

By 1903 Board inspectors had visited all technical colleges. There were 2,600 individuals attending technical education centres throughout the State with 3,420 enrolments. Brisbane Technical College had almost 51% of individual students and almost 49% of total enrolments. In addition, many State schools in larger towns had associated themselves with their local technical college, and were conducting technical classes in shorthand. As a direct result of these inspections, seven centres being funded for technical education lost their funding and ceased their technical education activities. South Brisbane Technical College almost lost its funding as a result of inspection as the State Treasurer was found to be a College auditor. He had to resign his college position to allow funding to proceed. Three other centres closed rather than be inspected. One of these, Stanwell, reopened for two years after the inspections were over, but neither of the other two centres ever reopened during the period covered by this thesis.¹³

The Board was unpopular with the technical colleges. The 1902 regulations tightened funding rules and reversed the financial position of some colleges to such a degree that some had to beg for extra funds, or even government loans. ¹⁴ It should be noted however, that the combination of economic gloom, initial withdrawal of funding, and imposition of unusual and restrictive conditions by the Board, threatened the viability of even Brisbane Technical College. This, the state's largest was considered by many, not only by McConnel its principal, to be a 'good' institution.

see Appendix 7 - Members of Selected Boards and Committees.; 27th RPQ for 1902, p.6-7.; *Brisbane Courier*, 13 June 1902, p.7.; 30th RPQ for 1905, p.19.

²⁶th RPQ for 1901, p.50.; 27th RPQ for 1902, p.49.; 28th RPQ for 1903, p.47.; B. McKeering, History of South Brisbane College of Technical and Further Education, Brisbane, Boolarong Publications, 1988, p.15.

Murray-Smith, op. cit., p.939, claims Brisbane Technical College had a credit balance of £332 in 1902, but a debit balance of £726 in 1903 and £469 in 1904, and to save itself from bankruptcy, humiliatingly went to the government for a loan.

Much more serious a problem however, was the Board's somewhat broad interpretation of its vague powers. It claimed to have authority over all technical centres in Queensland, a claim which brought it into direct confrontation with McConnel. He maintained that the Board's role was to serve as a link between Brisbane Technical College and all other Queensland Colleges. McConnel based this on assurances he had received from State Cabinet and on the *Brisbane Technical College Incorporation Act of 1898*. He believed the Board should correct any funding anomalies according to information he supplied, and should legitimise the practice of his college conducting examinations for all other colleges. McConnel unquestionably claimed authority over the Board as well as Brisbane Technical College.¹⁵

Despite McConnel's strong views the Board claimed authority over all State technical education. Both sides maintained their respective positions and, although the Board allowed Brisbane Technical College to conduct the 1902 examinations and issue certificates, the situation remained deadlocked. McConnel then asserted that as Brisbane Technical College was incorporated by an Act of Parliament it was outside the Board's jurisdiction.¹⁶

In 1903 the Board insisted on conducting all State examinations - McConnel claimed they made a 'frightful mess' and destroyed the College's good work. The Board was undoubtedly inconsistent with its funding decisions - signwriting, staircasing, telegraphy, wool-classing and shorthand were not funded as the Board considered them neither technical nor relevant.¹⁷

The October 1903 annual conference of technical colleges asked for syllabi to be supplied for scientific and technical subjects, so the Board decided to write syllabus documents for all technical colleges. It deliberately ignored syllabi used by Brisbane Technical College and employed Robert McLean Riddell¹⁸ to write new ones. McConnel saw this as a studied insult as he considered Riddell, a teacher from the rival South Brisbane Technical College, to be a 'half-trained young

Notes by McConnel on the Board of Technical Instruction, *Brisbane Technical College* papers, JOL.

This claim is supported by 29th RPQ for 1904, p.14.

¹⁷ McConnel, loc. cit.

see Appendix 2 - Details on Other Selected People.

whippersnapper'.¹⁹ McConnel's disposition did not improve the following year when E.C. Barton²⁰ was appointed to the Brisbane Technical College Council, and almost immediately informed McConnel, then aged fifty, that he was too old to be Principal and should resign.

In February 1904 the Board brought together all technical colleges to discuss these new syllabi, but Brisbane Technical College was conspicuously absent, and later criticised the new syllabi and refused to adopt them. But as Inspector Kennedy later pointed out, the College's refusal to attend a syllabus meeting, then refusal to adopt that same syllabus as they had not had opportunity to discuss it, was 'indefensible'.²¹ At this point, Brisbane Technical College Council refused to communicate with the Board, declaring that it would only deal directly with Barlow, Minister for Education. Barlow refused to override the Board and the College Council claimed this refusal was censorious of the College.

The Board then refused funding for some courses at Brisbane Technical College until they were submitted for approval. Barlow then suggested the Board withdraw all its demands on the College except that of the authority to examine, but the Board rejected this. Brisbane Technical College Council then resigned in disgust only to be replaced by one where the government members were appointed by the Board.²² The Board then attempted to remove McConnel but failed because even the Board's appointees on the new Council realised there were serious inconsistencies in the Board's attitude to Brisbane Technical College compared to other Colleges.

If the Board thought it was unpopular with Brisbane Technical College, it was passionately disliked by the Education Department. In June 1903, it had been extremely imprudent when it released a report attacking the standard of teaching in the State schools. The Board claimed that State school students were receiving far less than adequate foundations for technical education. Undoubtedly the Board considered

McConnel, loc. cit.; There was, it is clear from these papers, bitter jealousy between Brisbane and South Brisbane Technical Colleges. McConnel claims (in a deleted passage), that attendance at Board of Technical Education meetings was dominated by associates of the 'other' college, accounting for much friction and resentment.

E.C. Barton was a rising politician, a former instructor at Brisbane Technical College and a confirmed enemy of McConnel.

^{21 29&}lt;sup>th</sup> RPO for 1904, p.14.

Correspondence between Board of Technical Instruction and Brisbane Technical College, Brisbane Technical College papers, JOL.

itself an independent authority, free to attack and denigrate whomever it chose in its crusade to improve technical education.²³

This report immediately alienated State school teachers, inspectors, and senior people within the department, all of whom from this moment strongly endorsed proposals to bring technical education completely under departmental control. Even the Minister for Education, in a rare outburst of vitriol, publicly disowned the Board.²⁴ He criticised the Board for its denigration of State education, for its delusions of grandeur, for being 'irresponsible' in the technical sense, and claimed that the Board had caused all friction within technical education in Queensland.

Most people involved with the management of technical education in Queensland, except the members of the Board of Technical Education, were delighted when on 27 May 1905, the government abolished the Board, replacing it with a Technical Education Branch of the Education Department. Responsibility for technical education management was now in the hands of the Education Department.²⁵

Technical Education Branch

Riddell was appointed Inspector of Technical Colleges and was in charge of the fledgling Branch. He was to foster and develop the technical education system, to inspect the technical colleges, and to supervise funds. Riddell was beset with many problems but implemented uniform syllabi, examinations, and funding formulae in all technical colleges. His reports drew attention to the wastefulness and overlapping of services supplied by three of the four Brisbane technical colleges - North Brisbane, South Brisbane and West End. The Pharmacy College had no competition and was not included. Riddell's task would have been onerous at the best of times but in the prevailing circumstances was doubly difficult. Funds were scarce, population was

I.R. Tyrrell, The Reform of State Education in Queensland, 1900-1914, B.A.Honours Thesis, Brisbane, University of Queensland, 1968, p.112.; *Brisbane Courier*, 22 August 1903, p.3.

^{24 29&}lt;sup>th</sup> RPO for 1904, p.14.

^{25 30&}lt;sup>th</sup> RPQ for 1905, p.19.

static, and drought and depression still affected the State. Nevertheless, despite many complaints from McConnel, Riddell's new policies were particularly effective.²⁶

Educationally and socially, the most contentious of the new policies was that of a nexus between technical college funding and a hypothetical 'technical' value for each of their subjects. Cookery lost funding whereas science subjects received £2 for each £1 received in fees. Even those people opposing Riddell and his polices admitted however, that this particular policy brought more money to technical colleges.²⁷

The debate over this differential funding brought to a head the contradictions implicit in community attitudes concerning technical education. Were technical colleges to be educational 'Jacks of all Trades', content to reflect imagined needs and open to all who wished to dabble in 'education'; or were they to inspire and direct a new scientifically and industrially oriented education? In most of the other States the second view had succeeded by this time as '... liberal, socially-expansive and permissively-democratic viewpoints receded.'28 But in Queensland, following much debate, any distinction between the two became fuzzy and neither viewpoint held sway until much later.

Most people with a viewpoint on technical education in Queensland were unswervingly muddled in their beliefs. They seemed to believe that, while technical colleges should conduct popular classes to bring money into the community, they should also foster subjects implicitly and explicitly technical in nature, while providing equality of opportunity and social mobility, and should also be, in each locality, the centre of culture - the 'Working Man's University'.²⁹

By this time a parallel movement for a university drew obvious attention to a lack of a formal scheme of secondary education, other than the ten Grammar schools. The now defunct Board of Technical Education had supported this movement and, having previously drawn attention to a lack of higher studies in the technical colleges, had recommended establishing a technical university.³⁰

As a result of these assorted influences, Barlow proposed a post-primary scheme with evening Continuation classes and High Schools, both of which might lead to technical colleges and even university. He also recommended legislation to '... place

^{26 30&}lt;sup>th</sup> RPQ for 1905, p.28.

²⁷ Report of Brisbane Technical College, 1906, in *Brisbane Technical College papers, JOL*.

²⁸ Murray-Smith, op. cit., pp.947.

²⁹ ibid., pp.947-948.; Daily Standard, 16 August 1918, p.6.

^{30 29&}lt;sup>th</sup> RPQ for 1904, p.73.

technical education under State control . . . '31 A year later, in 1907, technical colleges throughout the State offered Continuation classes. These supplied vocationally oriented education in such areas as commerce, mining and agriculture, and furnished a link between primary schools and technical colleges.

Technical Instruction Act of 1908

There were now at least three discrete elements in the movement to bring technical colleges under State control. The metropolitan technical colleges wanted to circumvent the anomalous situation brought about by the *Brisbane Technical College Incorporation Act*. The government wanted to make the technical colleges more directly useful in improving the State's lack of development. And society wanted a post-primary system to prepare youth for higher studies, employment and life.

As far back as 1904, the government had announced its intention, reiterated by the Governor in 1906, to bring at least the metropolitan technical colleges under State control. With problems in the colleges being emphasised by Riddell's reports, there was, by this time little chance of the government abandoning its plans. The objectives of the new *Technical Instruction Act of 1908* were, to repeal the *Brisbane Technical College Incorporation Act of 1898*, to amalgamate the metropolitan technical colleges, and to provide some degree of effective control over other non-State Colleges. This would be achieved by authorising Technical Education Branch to withhold funding for any college not conforming to its policies. The College of Pharmacy was excluded from amalgamation as it would be included in some future university.

The *Technical Instruction Act of 1908* was eventually passed, and on 1 August 1909, Brisbane, South Brisbane and West End Technical Colleges became state controlled colleges. The Act also provided for State control of other technical colleges

through funding accountability. Country colleges were allowed, if they so wished, to place themselves under the control of the Technical Branch.³²

A new position, Director of Technical Education, was created and Barlow made it clear that he wanted someone in touch with modern developments in technical education. Both McConnel and Riddell applied but Leonard Canton Morris³³ was appointed from 1 July 1909³⁴, a position held until his death in 1938. Brisbane Technical College was renamed Central Technical College, Riddell was appointed Principal, and amalgamation of the three colleges actually occurred early in 1910 when technical classes at South Brisbane and West End were transferred.

The 'New' Central Technical College

The government passed the *University of Queensland Act* in 1909. A Senate was appointed on 14 April 1910, the first students were enrolled in March 1911, and the University of Queensland was officially opened on 1 June. It was established in buildings on the Domain of Old Government House in George Street, next to Parliament House - an area intended for the new Central Technical College. In 1911 and 1912, contracts to erect nine new Technical College buildings were let. By the end of 1914 these were ready and Central Technical College finally left the old buildings in Ann and Turbot Streets. Students moved into the new Technical college buildings in 1915.³⁵

Unfortunately, having been on-site since 1911, the University thought of these buildings as 'theirs'. This was pointed out by a confidential letter to the Minister for

C.A. Bernays, Queensland Politics During Sixty (1859-1919) Years, Government Printer, Brisbane, ?1919, p.435.; G. Logan, and E. Clarke, (eds.), State Education in Queensland: A Brief History, Monographs on the History of Queensland Nº 2. Brisbane, Department of Education, 1984, p.11.

see Appendix 2 - Details on Other Selected People.

^{34 33&}lt;sup>rd</sup> RPQ for 1908, p.20.

^{35 36}th RPQ for 1911, p.23.; 39th RPQ for 1914, p.137.; Bernays, op. cit., p.443.

Education from J.D Story³⁶, at that time wearing two hats as representative of both Technical Education Branch and the University. Story deplored the University's attitude regarding 'ownership' of the new buildings and said that as they were 'purpose built' for the new technical college, the Minister should not listen to the cries of the University for major changes. He went onto to say that he would present these thoughts to the University Board as the Minister's and would pretend to know nothing of the Minister's plans for Central Technical College.³⁷

While it was waiting for the move to its new site, Central Technical College was unable to cope with the upsurge in technical education after 1909. Domestic science in particular was in crisis and in 1913 Riddell complained that facilities for Domestic Science Day School were inadequate. Problems with the old site adversely affected technical education courses and the Minister admitted in 1914 that conditions were 'confused and congested'. He confirmed that this limited the College-conducted State school course to six months, but soon at the new site, 'a complete system' of domestic science education would be introduced.³⁸ Domestic Science education is discussed in detail in Chapter Three.

Technical Correspondence Courses

Central Technical College attempted to sidestep its accommodation problems by establishing correspondence lessons. Bookkeeping and accountancy were offered in 1912, Class III examination lessons for unclassified State school teachers in 1913, and a university matriculation course in 1914. These courses were described as a response '... to the present day call of equality of opportunity to share in the intellectual pleasures and material advantages born of the accumulated wisdom of the race'.³⁹ Unfortunately students and teachers ignored most of the offerings.

Director-General of Education, 1904-1920; see also Appendix 2 - Details on Other Selected People.

Document 84573, Confidential letter, 27 October 1913, J.D. Story to the Minister for Education, *EHU*.

^{38 37}th RPQ for 1912, p.138.; Brisbane Courier, 28 May 1914, p.6.

^{37&}lt;sup>th</sup> RPQ for 1912, p.139. (The offering date incorrectly appears as 1911 in many secondary sources; courses were 'prepared' in 1911, but not offered until 1912.); 38th RPQ for 1913, p.131.; 39th RPQ for 1914, p.138.; *Daily Standard*, 22 August 1918, p.5.; 23 August 1918, p.3.

Technical Colleges and High Schools

The *Technical Instruction Act of 1908* rationalised technical education in Brisbane, and centralised it under the Technical Education Branch. It did not extend Branch control to country colleges however, and - apart from Warwick in 1910, and Mackay in 1912, both of which voluntarily relinquished control - all other existing technical colleges were controlled by local committees until after 1918. Though technical education growth was rapid throughout the 1910s, it was hampered by this lack of central control and, despite Morris' reasonably successful attempts, it was not possible to enforce uniform standards of management, courses, or staff qualifications.

As part of a scheme to reorganise Central Technical College, a secondary school, Domestic Science Day School, was established in January 1910. This gave a vocational emphasis to secondary education in such subjects as manual training and domestic science, with a major role as a 'bridge' between primary schools and technical college. As it had a technical emphasis however, Domestic Science Day School is not usually regarded as Queensland's first State secondary school.

The year 1910 saw also the beginning of an Education Department policy which would have inordinate long-term effect on technical education management, and which would remain in effect until 1971. This scheme, trialled at Warwick⁴⁰ created a joint facility of technical high school and technical college. The scheme was upgraded to a joint facility of secondary high school and technical college, and then put in place at three other centres in 1912. This scheme was not taken further until 1919.

The 1909-1910 reorganisation of technical education in Brisbane led to a substantial rise in Central Technical College enrolments for adult technical courses, and in 1910 the Department decided that the demand justified the introduction of diplomas. This step significantly enhanced the prestige of technical education, though the diplomas did not at first convey the right to use a title or 'letters'. The first diplomas, including diplomas in domestic science, were awarded in 1912.

Meanwhile, in developing his plans for 'a complete system', Blair was strongly influenced by southern and overseas developments. Much interest centred on the USA, for as Morris said in 1913

In other countries . . . there has been a large extension of vocational education and a persistent effort to adapt the work of the schools to the needs of modern life. Greater stress is being laid on the educative value of the Domestic and other Manual subjects.⁴¹

In April 1914, Blair and Story inspected domestic science and other facilities in Ballarat and Melbourne. They were particularly impressed by the Ballarat Agricultural High School and its domestic science course. This visit clearly influenced the eventual establishment of rural schools (vocationally oriented primary schools) in Queensland in 1917, but more immediately, it helped Blair and Story to crystallise their plans for new domestic science facilities at Central Technical College. The new scheme involved a full-time Domestic Science school at Central Technical College, with full facilities for '... cookery, theory and practice ... laundry work and housewifery ... ambulance and home-nursing ... household accounts ... domestic science ... English subjects [and] arithmetic ... '42' The training was to be as practical as possible.

The need for State high schools had been discussed for many decades in Queensland. By 1909-1910, as Morris added his voice to the pleas, a favourable decision had been made. The first officially recognised State high schools in Queensland were established in 1912 at Central Technical College (Central Technical College High School), Mackay, Mount Morgan, Warwick, Bundaberg, Charters Towers and Gympie. In Brisbane, Mackay, Mount Morgan and Warwick, the High Schools were integrated with the Technical College. In Bundaberg, Charters Towers and Gympie, the high schools were in separate buildings but students attended technical college for specific subjects.

Funding for Technical Education

Although the statistics are often unreliable, it can fairly be said that for the first decade of the 20th Century, funding for technical education in Queensland remained almost static. During this period government funding fluctuated around a mean of £8,000-£10,000 with a minimum in 1904 of £5,000. These figures show that

^{41 38&}lt;sup>th</sup> RPO for 1913, p.126.

⁴² Brisbane Courier, 28 May 1914, p.6.; 38th RPQ for 1913, p.17.

government interest in the topic varied markedly. During the ensuing five years however, funding, even though inflated by a massive building program, grew from £20,000 in 1910 to a hugh £74,000 in 1915. In order of expenditure on technical education, Queensland was undisputedly third of all the Australian states and in 1914, even exceeded Victoria.

This is a phenomenon of some interest and can only be accounted for by Queensland entering a period of some prosperity in 1910, by Morris' new and vigorous technical education leadership, the building of a new technical college, and by a government finally prepared to invest heavily in technical education, and by the fact that many years of neglect had to be overcome. It also relates undoubtedly to technical education in Queensland, more than in any other State, being the introductory vehicle for a system of secondary education.

Summary

From 1899 to 1914 governments, the populace, society and interested lobbyists were forced to evaluate, define, and articulate their notions of technical education. During the first half of this period, the government wanted no involvement with technical education. It was forced into the *Brisbane Technical College Incorporation Act of 1898*, believing that this Act would solve the problem of what to do with technical education. Unfortunately for the government, this was not to be. The economic pinch caused by drought, the ever increasing funding being consumed by technical education at a time of scarce funds, government concern at some of the destinations for some of this funding, and the critical reports of inspectors, forced the government to create the Board of Technical Education. Now, the government thought, they could 'wash their hands' of technical education, as the Board would look after such problems.

This was not to be, as the Board, although well-intentioned, had a collectively large ego, and used a 'boots-and-all' approach to developing a system of technical education. They refused to accept that there were egos 'out there' as large as their own and that diplomacy was the order of the day, and they also refused to use existing expertise and knowledge. In so doing they created many powerful enemies and the result was a vocal and tumultuous period which ended in their own demise.

An important outcome of this however, was the creation of the Technical Education Branch of the Education Department. This action was the birth of a system of Queensland technical education. Although as yet there were no state controlled technical colleges, this was the first time that any system existed to enable technical education to come under direct government control.

The *Technical Instruction Act of 1908* changed the situation. Before this all technical colleges, except three, were controlled by Schools of Art. The exceptions were controlled by a College Council (Brisbane), a local committee (Ipswich), and a Victoria Institute (Allora). Now there was a state controlled system of technical education with its own technical college, and direct financial, but not managerial control over all other technical colleges. By the end of 1912 it had three technical colleges. Central Technical College would develop into a complex institution and would 'show the way' for other colleges. Eventually from Central Technical College, which itself would survive until 1974, would come many Metropolitan technical colleges, secondary High Schools, and an Institute of Technology which would in turn become a University.

After 1898, technical education was increasingly identified with the philosophy of national destiny, people as units of a common society, and educational specialisation. Instead of functioning as a vehicle for a homogeneous society, it became a tool for social re-engineering - a tool to insist that skills should be obtained to suit particular needs of society.

For a while after 1910, the state government used technical education to sway people's wishes. They saw education itself, not as a means of educating and enlightening the populace, but as a tool to get people to react in ways suitable to politicians and their lobbyists. Education would stop the drift to the cities, and ensure the existence of a trained workforce to satisfy the needs of the elite section of society. It was publicly argued that the vocational and utilitarian nature of technical subjects would not necessarily detract from their educative value. One substantial impact of technical education during this period however, was the introduction of high school education – from technical education came the modern state secondary system.

This chapter took technical education in Queensland from 1899 to 1914. It investigated this period of metamorphosis and began by surveying technical college numbers which varied considerably during the period. There was a detailed examination of the Board of Technical Education, why it was formed, the friction it caused, and its eventual demise. This was followed by an investigation of the development of a Technical Education Branch, the *Technical Instruction Act of 1908* and the creation and development of the 'new' Central Technical College. The

beginnings of technical correspondence courses were considered followed by a discussion on the first State High Schools. There was then some thought on why funding for technical education remained static for a decade and then exploded in the ensuing five years.

From 1915 to 1937 Queensland technical education was affected by multiple factors - the impact of the first world war, an Act of parliament in 1918 which allowed the taking over of non-State colleges, major changes to apprenticeships, and the 1929 depression. These, and other factors, are examined in detail in the next chapter.