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# A Brief History of Technical Education in Hong Kong 1863 to 1980

by Dr D D Waters ISO BBS



A paper presented on the occasion of the 30th Anniversary of IVE (Morrison Hill)

12 October 2000

## A Brief History of Technical Education in Hong Kong 1863 to 1980

# A Lecture Delivered by Dr D D Waters ISO BBS

#### On the Occasion of the Morrison Hill Technical Institute's 30th Anniversary

#### 12 October 2000

No person can know a territory
Who only knows what is happening in it today.
Anon.

As someone who in the 1970s was given the sobriquet of 'Mr. Technical Institute', I am proud and deeply honoured to be invited to address you all today. The occasion is Morrison Hill Technical Institute's (MHTI) 30th Anniversary, which falls in this, so called, Millennium Year.

Yes, with me as founding Principal, it is true a small skeleton staff of us moved into the then not fully completed MHTI building on American Independence Day -- the 4th July 1970. This was entirely coincidental I can assure you. The Institute had already operated for one year in borrowed premises, in the old Technical College at Hung Hom, which has since moved up in the world to become the Hong Kong Polytechnic University. This paper is largely about the history of craft and technician education in Hong Kong and the conditions that prevailed in the Territory at the time.

But let's start at the beginning. How did it all commence? First though it is interesting to recall that that great man, Henry Ford, once said:

'History is bunk. We don't want tradition.

We want to live in the present.

And the only history that is worth a tinker's damn is the history that we make today.'

Those words of Henry Ford contrast markedly with those of Winston Churchill, who is purported to have told an American boy entering a British public school:

'Young man study history, study history. In history lie all the secrets of statehood.'

#### Early days

So, as a great admirer of Sir Winston Churchill, I accept his words rather than those of Henry Ford. And, if we delve deeply, history tells us that in Hong Kong as early as 1863 vocational training in carpentry, tailoring, shoemaking, printing, bookbinding and gardening was being provided for 12 boys. Numbers later reached 30. These classes were held in a Chinese building under a Father Raimondi, not far from the Roman Catholic Mission House which then stood in Wellington Street, in what used to be called the City of Victoria.

You can almost picture the carpentry classes using the same kind of Chinese tools and labour-saving stools-cum-benches which we still employ today. With the latter one can hold a piece of timber being worked with one's foot and plane 'downhill' which makes good 'workstudy' sense. As a footnote, I recall one of our carpentry instructors at the old Technical College always using a Chinese plane when he wanted to get an especially good finish on a piece of timber. There is a lot to be said for Chinese tools.

But, retracing our steps, in the 1870s up to 100 boys, in addition to learning the Chinese language, were taught carpentry, shoemaking and printing by Roman Catholic brothers at the Reformatory at West Point.

Of course the original way of learning a trade was by an apprentice following a master craftsman from whom a lad picked up 'tricks of the trade'. These were seldom written down or made known to those outside the fraternity. A Chinese apprenticeship implied being almost a slave to one's master. In early years it meant being the master's cook, servant, laundryman and general dogsbody. In addition to paying respects and burning joss sticks to patron deities (such as Lu Pan for the building trades), in the first year or two a boy did little more than watch a master craftsman ply his craft as well as 'fetch and carry'. If the lad disobeyed he was scolded or beaten. Life was never intended to be easy.

But returning to institutional training. The first prize-giving ceremony at the Li Shing Scientific and Industrial College was held in 1905. Over 70 students had enrolled but by examination time, with a high dropout rate, only 35 remained. Some things never change. The founders of that college considered the objectives were to raise China from her 'low industrial condition' and to educate her sons in modern science and industry, and to train them to use their hands as well as their brains.

'We hope to train independent workers and not mere "hands" to be always under the direction of foreigners.'

Fine sounding words indeed at a time when the aim of most schools in the Colony was to train clerks and typists.

During the Governorship of Sir Matthew Nathan (1904-1907), the Government started to show some interest in elementary technical education. This culminated in the founding of the then, so called, Technical Institute, in 1907. It was completely different to the technical institutes that we have in Hong

Kong today. In the early 20th century it formed a department under the Director of Education. It had no building of its own but was housed in Queen's College, then sited on Hollywood Road. In 1913 it entered a mere 161 candidates for local examinations of whom 116 passed. Subjects included shorthand, sanitation, building construction and field surveying. This first Technical Institute was absorbed into the Hong Kong University when it opened in 1912.

#### Post-World War One

The development of technical education was nevertheless slow. But in 1926 the Salesian Roman Catholic Fathers, who have done so much over the years to promote technical education, commenced shoemaking, carpentry, tailoring and printing courses and, at about the same time, the old Taikoo Dockyard in Quarry Bay started classes for their own apprentices.

In 1931, a committee was formed under the chairmanship of Sir William Hornell, then Vice-Chancellor of Hong Kong University, to consider the possibility of introducing a system of technical education. The Report's three main recommendations were:

- \* the setting up of a junior technical school,
- \* the provision of evening classes for apprentices, and
- \* the commencement of full-time classes at a later date.

As a result the Junior Technical School, Government's first venture into full-time technical education, was up and running by 1932. This secondary school ran a comparatively narrow, four-year course designed mainly as pre-apprentice training for the engineering trades. I remember JTS, as it was usually called, in the mid 1950s in more or less that form, where the Headmaster, an Englishman, was a pattern maker by trade and proud of it. For those who do not know, a pattern maker was a craftsman who made timber moulds for metal castings in a foundry. It was not until 1957, when the name was altered to Victoria Technical

School (VTS), that a new curriculum was phased in. It changed from being a trade school and became a secondary technical school.

Meanwhile the Far East Flying Training School -- the original name -- commenced training pilots and engineers for the civil aviation industry in 1934. The Far East Flying and Technical School Limited as it was later renamed, sited at Kai Tak, was a private institution. It shut its doors in 1983 because of the rapid expansion of government sponsored technical education.

Meanwhile, retracing our steps, further progress in the field of technical education was made pre-World War Two when, in 1935, the Salesian Society founded the Aberdeen Trade School. This provided a sound general education, together with training considered to be comparable to an apprenticeship. Like the JTS this School too was converted into a secondary technical school in the late 1950s. I recall visiting the Aberdeen Trade School on its open day, in January 1955, when I was struck by the high standard of craftsmanship of the students' work on display.

The first Government, post-secondary technical institution was the old Trade School which opened in Wood Road, Wan Tsai (using the old spelling), in 1937. It stood on the corner where the Vocational Training Council's multi-storey office block stands today. At the time of opening, under Principal George White, it ran courses in building, mechanical engineering (with a bias towards automobile engineering) and marine wireless operating. The Trade school also took over the evening classes previously run by Taikoo Dockyard at Quarry Bay.

The new, then two-storey (an additional floor was added in 1953) Trade School was well constructed on the lines of other colonial-style buildings erected between the two World Wars. It had high ceilings with paddle-fans because there was virtually no air-conditioning in Hong Kong at that time (an exception was the Hong Kong and Shanghai Bank). The Trade School was one of the few examples of good face brickwork. In the 1950s navigation, commerce and textile

departments were added. The building was demolished in 1988, seven years after it had become an annexe of the Morrison Hill Technical Institute. There are antiquarians in Hong Kong today who feel the building should have been preserved.

But, retracing our steps, when the Pacific War broke out in 1941, technical education was being provided in Hong Kong at secondary, trade school and post-secondary levels, but on a limited scale. There were about 200 full-time students attending post-secondary courses at the Trade School, in Wood Road, although the School did not receive a great deal of support from employers, except from the dockyards and members of the then named Building Contractors' Association (now the Hong Kong Construction Association). The latter even erected the Trade School at cost price under the supervision of Mr. Tam Shui Hong, an affable, elderly gentleman I recall. In addition, generous building contractors would sometimes donate a load of bricks or sand for use in practical classes.

#### Post-Second World War

In 1947, after World War Two was over, the Trade School (in that year renamed Technical College), the Junior Technical School, the Aberdeen Trade School and a number of centres running evening classes in technical subjects reopened. They were soon operating at pre-war capacity. To this group were added, in 1953, the Ho Tung Technical School for Girls in Causeway Bay, and Tang King Po Secondary School in Kowloon. For many years the latter also had a trade school section which ran classes in printing, shoemaking and tailoring. This Section was closed in the late 1970s after more Government technical institutes and pre-vocational schools were up and running.

My early memories of the old Technical College, in Wood Road Wan Chai in the mid 1950s, are crystal clear: like the views at that time from Hong Kong Island during the winter months over to Kowloon and above and beyond

Lion Rock. To give you an idea what it was like in the vicinity of the College: the Wan Chai streets and alleys seemed far more cluttered in those days with numerous bustling stalls and small shops. I could go to a barber's shop in the then narrow Tin Lok Lane, not far from Wood Road, and have a haircut, a shampoo, a shave and a manicure for \$2.70 (all dollars quoted in this paper are Hong Kong dollars). Being a generous chap I gave a 30 cents tip. The College was quite hemmed in in those days and the quadrangle, with teaching accommodation all around, only allowed for limited parking. Many teachers did not have cars then. Students, however, still played basketball but under restrained conditions. They also played the Chinese game of 'kicking the shuttlecock' which I also enjoyed playing.

The Hong Kong Funeral Parlour then was just around the corner from the College. At various times during the day brass bands, leading funeral processions along the street, would strike up tunes such as, Abide With Me, Polly Wolly Doodle All The Day and, Yes, We Have No Bananas. There was a small flower market close by. Even when the College moved to Hung Hom, in Kowloon, there was a funeral pavilion next door. This raised a certain amount of consternation regarding our feng shui as relatives of staff fell sick. We had to rearrange our desks.

At the old Technical College in Wood Road there was both a senior and a junior staff room with about 10 of us teachers in each. Student-teacher contact hours varied from about 21 to 25 (or even more) a week and our Principal insisted, at one time, that all classes had a short weekly test first thing every Monday morning. When I first arrived by ship on a four-year tour in the mid-1950s, in what was a rather colonial atmosphere, I was impressed by the students' ability in mathematics, science and draughtsmanship. English was not up to the same standard. Metaphorically, students still did not step on the teacher's shadow.

There was sometimes talk by Chinese teachers of students being more receptive to Chinese methods of imparting knowledge. Such as more dictating of

notes. 'If they write things down they remember them', I was told. Even Professor F S Drake, an Englishman heading the Chinese Department at Hong Kong University who lectured in the medium of Mandarin, sang the praises to me of rote learning in a Chinese environment.

On a visit to a building site in January 1955 in So Kon Po, to which some of our students were attached for on-the-job training, I found that craftsmen were being paid \$5.00 a day and women labourers \$1.50. Some of the latter were straightening nails which had been knocked out of dismantled formwork (used for the pouring of concrete) so that the nails could be re-used. This practice stopped a few years later when it became cheaper to buy new nails. While talking of money, our full-time students could expect, on average, a salary of \$300.00 a month in the mid 1950s after a three-year, full-time, post secondary course, when they took up their first jobs.

There was also a clause written into the Government Public Works Department standard specification saying that if any of our building graduates could not find employment at the end of their course, main contractors were forced to take on two trainees on each major site. Their salary was \$150,00 a month.

Still on the subject of money: one evening student used to walk home from the College in Wood Road to Sau Kei Wan, after class, in order to save his 10 cents second class tram fare. In those days second-class was on the lower deck.

Continuing with another subject: with Hong Kong's population increasing post-World War Two at about one-million per decade (in the mid 1950s it stood at around two-and-a-half million), coupled with rising standards of prosperity, impetus was given to the further development of technical education. As early as 1953, the Technical Education Investigating Committee (which

produced The Burt Report) concluded that a technical college in Kowloon was essential. The Chinese Manufacturers' Association (CMA) offered to donate one million dollars if Government would provide a similar sum and a site. The Administration accepted the offer and the College commenced classes in November 1957, on its new Hung Hom campus, after we stopped teaching for three days to move physically from Wan Chai.

In the 1947/48 academic year there were a mere 25 full-time and 599 part-time students on roll at the Technical College (TC) in Wood Road. By the time TC had moved to Kowloon these figures had increased to 345 full-time and 5,532 part-time. Various walks of Hong Kong society were extremely generous. The College expanded rapidly.

Buildings added over the next decade or so included an all-purpose hall, a dyeing and finishing block, an electrical laboratory, a multi-storey, craft workshop block, a heavy-current electrical laboratory as well as a library, a textile workshop block and a new classroom wing. It was estimated that in 1967, of the total building cost of \$7.5 million at the Hung Hom Technical College, about 64 per cent of funds had been donated. Similarly, out of a total estimated cost of \$6.0 million for equipment, 40 per cent had been donated by industry.

Nevertheless, many of us were far from satisfied with the rate of expansion, bearing in mind the need at the time for technical education. Money allocated by Government for recurrent costs was strictly limited. For example the one-year, full-time electrical engineering technician level Radio Officers' course, in 1967-68, was estimated to cost only \$61,262 to run for a full year. With an average of 25 students in the class this worked out at a total cost of \$2,450 a student each of whom paid a nominal fee of \$400.00 a year.

During the 1960s, the Technical College was mainly pre-occupied with technician level teaching the entry requirement for which was completion of Form Five. But for some part-time technician courses completion of Form Four was acceptable. The College also ran a limited number of post-Higher Diploma endorsement courses rated at technologist level. Some led to membership of British professional institutions.

Believing that 'local ginger is not hot' a large number of our students, on graduating, left for Canada or Britain. In latter cases we frequently arranged for them to take up employment and to study on a day-release basis overseas. Our students acquitted themselves splendidly. We took pride in the fact that they were not afraid to roll up their sleeves and get their hands soiled.

The old Technical College was very much 'all things to all men' in the 1960s. It even ran a limited number of craft and pre-apprenticeship courses. A few of the students attending had only completed Form One or Form Two because nine years of universal, compulsory, free education had not been introduced. This was phased in between 1978 and 1981. In fact the impetus for the introduction of this general education milestone came largely from Britain.

Much rapid development took place under S J G Burt (nicknamed 'The Bull' in Cantonese) who joined the Wan Chai Trade School in 1938. He became Principal of the then fairly recently renamed Technical College in 1951 and served until 1963 when he joined the World Bank as an advisor on technical education.

As elsewhere, technical education depended very much on personalities and Sidney Burt, although not always popular, has often been regarded, deservedly, as the 'grandfather' of technical education. Instead of a briefcase he carried a Hong Kong, rattan basket and wore a Saigon linen, wet-wash suit, both carry-overs from an earlier era. In addition to driving us, his staff, he also drove himself. Without work he was like a bear with a sore ear. Every morning he was reputed to wake up and say to himself, 'Thank God for technical education'.

Sidney was also a good 'cadger'. Most of the many donations made to technical education in his time were largely due to his determined efforts. He had worked as a radio officer on a ship in earlier life. Every Monday morning he would lead a small retinue of staff around the College on a formal inspection just as a captain does on board ship.

I recall when a newly appointed Hong Kong University member of staff came to see him, about the setting up of a University Extra-Mural Department. Burt told him frankly it was a waste of money. 'The Technical College provides all the evening classes the Colony needs', he insisted.

The Director of Education wanted Burt to move into the Departmental Headquarters to oversee technical education but he preferred to do this while serving as incumbent Principal at the Technical College. Because of this inherent stubbornness the development of technical education was probably retarded. There was no 'Senior Education Officer (Technical Education)' post in Headquarters until 1967 and no 'Assistant Director (Technical Education)' post until 1972. But Hong Kong owes Sidney Burt a great deal for laying the foundations of technical education.

But moving on: the Principal and staff of the College had long felt that a second Government institution was needed which, although bolstered by some technician programmes, would concentrate on craft courses. This was why the Morrison Hill Technical Institute came into being in 1969. In fact there was a school of thought which believed that the first technical institute should run craft courses only, but, as things have since developed, it would have been an incorrect move. One of our more advanced pursuits at MHTI, in addition to technician education, was technical teacher training. This was transferred away in 1974 with the establishing of the Technical Teachers College.

As the first member of staff of a technical institute, I was officially appointed as founding Principal of MHTI in July 1968, more than one year before it opened in borrowed premises. This was the planning period. The initial cost of building the Morrison Hill Technical Institute was around \$4.0 million plus \$3.0 million for equipment, all donated by the Royal Hong Kong Jockey Club, although there were other, much smaller, donations.

Looking at these and other figures one can see how costs have shot up over the past 30 to 40 years, although technical education has also, agreed, become far more sophisticated. For various reasons the completion of the MHTI building was delayed and, as mentioned at the start of this paper, the Institute did not start classes in its new building until 1970. Earlier on, consideration was given to calling it the 'Wan Chai Technical Institute' but some officials in the Government Education Department Headquarters felt, in those days, this would have had given it a 'Suzie Wong' image. Consequently, it was named the Morrison Hill Technical Institute. As you know it was officially opened 30 years ago today, on 12 October 1970, by the then Governor the late Sir David Trench.

I was pleased it was a hot day. After the ceremony Sir John Cowperthwaite, who has gone down in history as a capable Financial Secretary and a law unto himself, came up to me mopping his brow. 'Principal', he said, 'I'll see you get this hall air-conditioned!'. In spite of his promise it was many years and countless memoranda later before it actually was. I am talking of an institute where, in 1970, one of the few air-conditioned rooms was the Principal's office and this was because an overseas advisor had been persuaded to write it into his report. Administrative Officers talked dismally at the time of creating 'a dangerous precedent with other institutions jumping on the bandwagon'.

Looking around in the vicinity of MHTI: quarry men started blasting away in 1926 at the solid granite hill on which the Morrison Hill Mission Society building originally stood. The Hill was not totally levelled until around 1970

when the new Technical Institute was opened. Although we had wire netting screens to protect the Technical College windows in the 1950s, demolition teams still managed to break a few panes of our glass after they had beaten gongs as warnings and blasted away at 12 noon every week-day.

It was great getting back to my old stamping ground at MHTI, in 1970. I have always considered the four years I spent setting up and serving as Principal of the Morrison Hill Institute as one of the most satisfying periods of my career. I had splendid staff. Nevertheless, equipment was far more basic then than that used today. TIs were a new venture for Hong Kong. For us it seemed, at times, almost a spiritual search for the mountain top.

But moving on. In the latter part of the 1960s it had become obvious that one technical institute was not going to be sufficient to serve Hong Kong's industry which, before China started opening up in December 1978, was largely fairly basic manufacturing. As a result the Technical Institute Committee, of the Industrial Training Advisory Committee (ITAC)(on which I sat), endorsed our proposals that five TIs were required with a further three coming on stream later, making a total of eight.

Although many were dissatisfied with the pace of development, with Kwun Tong and Kwai Chung Institutes as proposed by the Education Department only coming into being in 1975, the Government Public Works Department wanted to delay the completion of the new buildings. The then new Governor, the late Sir Murray MacLehose, held a meeting in Government House in early 1972. He soon let it be known '... there would be two more technical institutes by 1975'. And there were. Lord MacLehose, as he later became, was a man of action.

Carrying on from there the Haking Wong and the Lee Wai Lee Institutes came on stream in 1977 and 1979 respectively, although the latter was not entirely completed until 1980. Extensions were made to these institutes at later

dates. Also, with the introduction of the Apprenticeship Act and the Designated Trades Act, part-time day-release courses built up rapidly.

But in those days, although useful as guides, there was a tendency to put too much faith in the Government Labour Department manpower surveys. For example, if a survey showed that 129 tool and die makers were required some planners seemed to believe that this exact number could be trained, in a technical institute, and, from then on it was just a question of slotting them into vacancies when they completed their course. Insufficient thought was often given to broad-based technical education to suit the rapid pace of change. After all, Hong Kong now has little manufacturing.

But retracing our steps yet again back to the latter half of the 1960s. A proposal was made that the old Technical College should be upgraded to become a Polytechnic. This proposal really emanated from Britain in the wake of the Polytechnic Act which had then been introduced there. Not everyone agreed with the proposal. Some would have preferred that the Technical College in Hong Kong remained as such and a new polytechnic be build on an entirely new campus.

What happened is now history. The Technical College was upgraded to Polytechnic status in 1972 and, during the 1970s in spite of some growing pains, the rate of expansion has been equalled in few parts of the world. Today the Polytechnic University, as it became in 1994, is one of the best examples you can find anywhere of 'academic drift', starting life as a humble trade school. It has much to be proud of.

#### **Final Thoughts**

In recent months especially, since the Handover of Hong Kong from Britain to China, education - including technical education - has been under the microscope. Today it is fashionable to denigrate Hong Kong's past education system. After all, most people have been to school and, therefore, many are instant experts.

Claude Burgess, Colonial Secretary from 1958-1963, said that Hong Kong was a problem of people. Indeed one sometimes wonders how other countries' education systems would have fared if their populations had increased at the rate Hong Kong's has. Post-World War Two education started from a low base line, but by 1981, universal, compulsory, free education had been introduced.

The proof of the rice dumpling has to be in the eating, just as you judge an education system by the students who graduate. Many of those who studied technical education in Hong Kong have gone right to the top of their chosen fields. A few have graduated from the Polytechnic, or its predecessor the Technical College, and have become members of the Legislative or Executive Councils.

To achieve what we have, certainly in the old days when funds were restricted, there had to be a force of long-serving, dedicated teachers. Members of staff who gave stability and shape to the technical education scene, in spite of its limitations some of which have been noted in this brief paper.

If you cannot live with change Hong Kong is not the place to be. Certainly over the past half century the pace of change has been staggering. I cast my mind back to when we teachers were invited in 1956, by past building students, to a Chinese dinner in the woodwork workshop, at the old Technical College in Wood Road. They engaged outside caterers and the food was cooked in the corridor. The cost was around \$100.00 per round, Chinese table seating 12 persons. Today, every New Year I am graciously invited by my past student, some of whom have already retired, to a Technical College/Polytechnic/Polytechnic University Ball at the Grand Hyatt. How things have changed! As you can see I still keep in touch with some of my old students, both locally and overseas, some of whom I taught over 40 years ago.

Old people recall the past gladly and shrink characteristically from contemplating the future. But obviously things are going to continue to change, just as some of us in the 1970s could visualise that an organisation similar to the Vocational Training Council (VTC) was not so far away. But just as in the colonial 1950s and '60s 1997 was seldom mentioned, looking into the crystal ball today to decide what technical education will look like half a century from now has to be another story.

Thank you again for inviting me to share this very special day with you.

#### About the Speaker

Dr D D Waters, who was born in 1920, sailed from England for Hong Kong in 1954. It has been his home ever since. He taught building at the old Technical College (now the Polytechnic University) becoming Head of the Building Department in 1963. In 1968 he was appointed Principal, more than one year in advance of the opening of Hong Kong's first Technical Institute at Morrison Hill.

In 1972, he was transferred to the Education Department Headquarters to oversee the setting up of additional Institutes. He later became the Assistant Director (Technical Education) and responsible to the Director of Education for Hong Kong's technical education system.

Dr Waters served as a Justice of the Peace in the 1970s and was made a Companion of the Imperial Service Order by Her Majesty the Queen in 1981, largely for his work in technical education. In 1998 he was awarded a Bronze Bauhinia Star, by the Hong Kong Special Administrative Region of China, for his work in heritage conservation.