The Early Years
From Government Trade School to Hong Kong Technical College
1937-1972
Virtually all the world's technological universities started out as technical institutes or colleges. The Hong Kong Polytechnic University is no exception. It took embryonic form in 1937 as the Government Trade School, representing an early Government venture into post-secondary technical education.

However, the development of technical education in Hong Kong dates back a great deal earlier, finding its tentative beginnings in the mid-19th Century. As far back as 1863, vocational training in carpentry, tailoring, shoemaking, printing, bookbinding and gardening was provided for 12 boys at the Roman Catholic Mission House, which stood in Wellington Street, Central.

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.

The founders of the Li Shing Scientific and Industrial College, which held its first prize-giving ceremony in 1905, set out to produce "independent workers and not mere hands to be always under the direction of foreigners". Their stated objective was to raise China from her "low industrial condition", to educate her sons in modern science and industry and to train them to use their "hands as well as their brains".

Not until the Governorship of Sir Matthew Nathan (1904-1907) did the administration begin to display an interest in elementary technical education. This culminated in the founding of the Technical Institute in 1907. It came under the control of the Director of Education and was housed in Queen's College, then sited in Hollywood Road. Courses were provided in shorthand, sanitation, building construction and field surveying. When barely five years old, this institute was absorbed into The University of Hong Kong, on the latter's inception in 1912.

In the early 1930s, the Salesian Brothers, at their school in Third Street, in the Western District of Hong Kong Island, offered trade training in printing, shoemaking and tailoring. The evening institute of the Education Department included classes in commercial subjects, together with a few evening classes for apprentices of the Taikoo and Kowloon Docks.

**An Academy in Embryo**

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
- Consideration of the commencement of full-time classes at a later date.

As a result, the Junior Technical School, the Government's first venture into full-time technical education, was up and running by 1932. When its name was altered to Victoria Technical School in 1957, a new secondary technical school curriculum was phased into this establishment.

Further progress was made in 1935, when the Salesian Society founded the Aberdeen Trade School. This provided a sound general education together with training considered comparable to an apprenticeship. This school, too, was converted into a secondary technical school in the late 1950s.

The year 1937 not only saw the establishment of the Government Trade School, which would eventually become the progenitor of the Polytechnic University, but it also marked the invasion of China by Japan, exacerbating the problem of immigration that had dogged Hong Kong from the outset of its existence. New arrivals pouring into the territory quickly raised the population to 1.6 million — 10 times the figure recorded about 50 years earlier.

At the height of the influx, more than half a million, with nowhere to go, were sleeping in the streets. Poverty and overcrowding bred epidemics of smallpox and beriberi, which killed 4,500 in 1938.

Despite this burden on its housing and social services, life in Hong Kong between the two World Wars, still moved at a leisurely pace, remaining heavily dependent — as it had been from the outset — on China trade as the staple of existence.
Though steam had taken over from sail, the harbour remained crowded with ships of all flags, under which plied wind-borne coastal junks and fishing vessels with their distinctive latticed rigging.

So dominant was China trade in the local economy that other forms of industry were marginal to the main thrust of affairs. Inevitably then, this maritime preoccupation played a large part in dictating the nature of courses provided by the Trade School.

Marine wireless operating and mechanical engineering figured prominently in the curriculum, along with courses in building construction. All these were taught in a two-storey structure — to which a third was added in 1953 — with fine face-brickwork, well founded along the lines of other colonial-style buildings erected between the Wars.

The School stood on the spot in Wood Road where the Vocational Training Council's 19-storey block stands today. The vagaries of air circulation, generated by paddle fans suspended from high ceilings, necessitated the use of paperweights to prevent the loss of important documents.

During those turbulent days, employers showed little enthusiasm towards the School. There was no marked degree of support forthcoming — other than from those in the then strategic dockyard industry, together with members of the Building Contractors’ Association.

---

**Proud to be one of the first graduates**

— Mr Ng Wing-hong, 1939 Trade School graduate

As the Chinese saying goes, it takes 10 years to grow a tree but a hundred years to nurture a generation of talent. To Mr Ng Wing-hong, this carries double meaning. During the commencement ceremony of the University's 65th anniversary celebrations in March 2002, he generously donated $200,000 to PolyU in support of the University's Tree Naming Fundraising Campaign.

As one of the first graduates of the Government Trade School, he has also seen, more than half a century after his graduation from the class of 1939, his own son's scientific innovation bear fruit at PolyU.

"I'm most proud and honoured to have the chance to study in this wonderful Institution and to be one of its first graduates," said Mr Ng, a building graduate who was also the first alumnus to teach evening courses at the Trade School. "I earnestly hope my donation can contribute to the further development of my alma mater."

Now in his eighties, Mr Ng is among the first supporters of the University's new tree naming campaign, which gathers funds for the Development Fund of the University.

Although the English language standard of many evening building students during those early days was not high, he recalled, the training offered by the Trade School was none the less very professional. Armed with a Diploma in Building, Mr Ng later opened a construction company with his father, and continued to develop his building career until his retirement in 1997.

Mr Ng's son, Dr Ng Tze-chuen is the dentist-scientist who masterminded the space tools known as the "Space Forceps" and the "Mars Rock Corer". The initial concept of these tools, conceived from the design of a pair of dental forceps which he invented, came to fruition when it was developed into a multi-purpose forceps system through the collaborative efforts of a team of PolyU engineers. The Forceps were used in the Russian MIR space station and the Rock Corer will be the first instrument made by local Chinese to reach Mars in 2003. Both the Forceps and the Rock Corer have won coveted honours and awards at home and abroad.
The latter body proved so receptive that it offered to erect the school at cost price, under the supervision of one of its members, Mr Tam Shui-hong. Loads of bricks or sand were delivered from time to time by benevolent contractors for use in practical classes.

The Second World War brought some damage to the School building. Nevertheless, in 1947, the Trade School, in that year renamed Hong Kong Technical College, was reopened, along with the Junior Technical School, the Aberdeen Trade School and a number of centres offering evening classes in technical subjects. They were soon operating at pre-war capacity.

**An Accelerating Tempo**

The resurgence of the Hong Kong Technical College's was accompanied by a rapid restoration of the immigrant tide that temporarily went into reverse flow during the wartime occupation. Exacerbating the new exodus from the Chinese mainland was the civil strife there, placing a crippling handicap on a Hong Kong still struggling to regain its pre-war momentum.

Other momentous changes were to follow. On 18 May 1951, it seemed that Hong Kong's whole reason for existence was vanishing at the stroke of a pen, virtually overnight. To comply with a United Nations Resolution of that date, arising from China's entry into the Korean War, the Hong Kong Government was required to impose a complete embargo on the export of strategic materials to its key trading partner.

The previous year had produced the best trade performance on record — an all-time high of $1,314 million. In the aftermath of the embargo, figures plummeted, and it looked as if Hong Kong was finished as a world trading port. Even the Government's official report for the year, not normally given to hyperbole, conceded: "It is no exaggeration to say that the Korean War and the world events following it have put Hong Kong in an economically impossible position."

However, Hong Kong responded to this crisis by turning a potential obstacle into a strategic advantage. It embarked upon its own industrial revolution, crammed into months rather than the decades that Europe took to achieve that phenomenon a century earlier.

Stimulated by the massive injection of Shanghaiese talent and money that had begun flowing into Hong Kong, even before the collapse of China's Nationalist Government in 1949, occasional small-time manufacturing went flat out and big-time.

The UN embargo, together with a growing influx of refugees, had also become catalysts for change in Hong Kong's hierarchical system. Where hitherto the colony had been notorious for its administration in the interests of the long established and well entrenched mercantile community that founded it, power now moved into the hands of a new breed of entrepreneur — the fast emerging, home-bred, industrial tycoon.
The quest for trained technical skills and talents had never been more urgent or compelling, yet parental pressure continued to direct the course of most students toward the traditional professions of medicine and law. The first choice of most students, completing Secondary Form Five in the 1950s, was to carry on through Lower and Upper Sixth Forms and then enter The University of Hong Kong. The next choice was often Northcote or Grantham Teacher Training Colleges, with the Government Technical College following up in the rear.

Despite the rapidity with which Hong Kong was transforming itself into a major manufacturing centre, exporting goods all over the world, the maritime tradition died hard in its educational curricula. A Navigation Department was added to the Technical College in 1951, followed in 1954 by a Commerce Department and, three years later, by a department devoted to the textile industry.

In the light of the fact that women were making up a significant portion of the new industrial workforce, girls were first admitted to full-time technical courses in 1955.

The Move to Hung Hom

Recognising that manufacturing, rather than trade, was going to prove the key to Hong Kong’s survival, a Technical Education Investigating Committee was convened in 1953 to produce the Burt Report, concluding that a Technical College based in Kowloon was essential to the achievement of this objective.

The Chinese Manufacturers’ Association offered to donate $1 million toward a new college in Kowloon if the Government would donate a similar sum and provide a site. The Government accepted the offer and in 1956 began construction of a building for the
Hong Kong Technical College. In the following year, the Governor, Sir Alexander Grantham, opened the new premises in Hung Hom, a landmark in the history of technical education in Hong Kong.

In the same year, it was proudly reported that "the college can stand comparison with most colleges of similar status in the United Kingdom and other parts of the world".

When graduating students of the mid-1950s took up their first jobs, they could expect, on average, a salary of $300 a month after a three-year, full-time, post-secondary course. A clause in the Government Public Works Department specifications ensured that any building graduate unsuccessful in obtaining employment must be taken on — at the rate of $150 a month — by one of the main contractors, who were obliged to employ two such trainees on each major building site.

Enrolment at the Technical College increased at an astronomical pace. In 1947/48, it stood at a mere 25 full-time and 599 part-time students. By the time the College moved to Hung Hom in November 1957, these figures have grown to 345 full-time and 5,532 part-time students. The aim, generally, was to recruit 40 students per class.

Buildings added to the Hung Hom site over the next decade reflected recognition of the growing predominance of manufacturing in the Hong Kong economy. They included an all-purpose hall, a dyeing and finishing block, an electrical engineering laboratory, a multi-storey craft workshop, a heavy-current electrical laboratory, a textile workshop, library and new classroom wing. Of the $7.5 million needed for this expansion, about 64 per cent came from donated funds. Similarly, out of a total estimated cost of $6 million needed for equipment, 40 per cent was donated.

Despite the pace of this development, many of those involved with technical education remained dissatisfied. They believed it still fell short of the actual need to keep pace with the astonishing powerhouse of industry into which Hong Kong was being transformed.

Collectively, the Hong Kong community, including many people in the administration, failed to recognise that the real heroes and heroines of Hong Kong's tooth-and-nail survival in those troubled post-war years were not emerging from the hallowed halls of academia, but struggling up from the bottom to acquire whatever skills they could in order to earn their living or die.

The syllabus offered by the Technical College was concerned mainly with post-Form Five technician level courses, but for entry to 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 of these led to membership of British professional institutions.
In addition, the College conducted evening preliminary and general courses enabling students to raise their educational levels in English, mathematics and science, on completion of which they could proceed to a technical course. Before the introduction of universal education into Hong Kong, many hopefuls followed this route, which necessitated attendance at classes three or four nights a week.

Outside the bounds of the college campus at Hung Hom, technical education was making slow progress. Not until the establishment of an embryonic Morrison Hill Technical Institute in 1969 was there any further conspicuous development in this still largely neglected field.

Due to delay in completing its premises, Morrison Hill had to begin operation in borrowed premises at the Hung Hom College. This paved the way for a separate syllabus concentrating on craft courses, supplemented by some technician programmes.

**A Visionary Idea**

It seemed to some — even as late as the 1960s — that technical education was little more than a production line, turning out tailor-made numbers of graduates specifically designed to meet whatever orders might arise. However, all that was to change as the result of the events of that decade.

Today, that attitude toward technical education would appear not just outdated but bizarre. Hong Kong has since come a long way. The reality now is that most manufacturing processes have moved north into the Chinese mainland. Hong Kong is left largely with service industries, and a whole new range of courses has had to be developed to produce graduates whose varied skills are appropriate to the more sophisticated needs of a modern business and financial centre.

From the outset, other than the pioneering efforts of missionary societies with their own basic trade schools, initiatives in technical education had been left to the Hong Kong administration. The technical education that developed through the immediate pre-war and post-war years was government-managed and government-run.

In 1965, Dr the Honourable Sze-yuen Chung came up with a visionary idea. He addressed his fellow Members of the Legislative Council on the then fairly radical topic of founding a "polytechnic-type institution". What he propounded would entail
nothing less than a fundamental reappraisal of the status quo, yet it was a notion only three years ahead of its time, for in 1968 there arrived a memorandum from Westminster much to the same effect.

The Westminster proposal was more specific. It visualised, in essence, the conversion of the government Technical College into an autonomous polytechnic. The initiative derived from Britain’s own — then comparatively recently introduced — Polytechnic Act.

The recommendation was not greeted with unanimous acclaim. There were some who did not agree with this upgrading, preferring to see the Technical College remain as such, distinct from a new institution separately founded on a new and larger campus — along the lines that would later establish the City Polytechnic in 1984. Fitting a full-scale polytechnic into a site originally designated for a technical college, in the increasingly crowded environment of Hung Hom, struck the critics as akin to pouring a quart into a pint jug.

Nevertheless, the Westminster proposal began to take concrete form. In May 1969, a Polytechnic Planning Committee was set up under the Chairmanship of the late Dr Tang Ping-yuan to make more detailed recommendations. Upon Dr Tang’s passing away in 1971, Dr Chung assumed leadership of the committee, which outlined the blueprint for a polytechnic catering to 4,000 full-time and 20,000 part-time students by 1974.

The Committee’s recommendations were accepted by the Government on 28 July 1971, and plans went ahead to disestablish the Hong Kong Technical College and upgrade it, in 1972, to polytechnic status.