



1. Introduction

1.1 Ever since the establishment of the Junior Technical School on Caroline Hill in 1932, vocational education has a history of more than 80 years in Hong Kong. Yet it was not until the establishment of the Vocational Training Council ("VTC") in 1982 did Hong Kong have a statutory organisation dedicated to development of vocational education and training ("VET"). In 2013-2014, there were 46 500 students enrolled in full-time vocational education programmes offered by VTC, accounting for around one-tenth of overall full-time students at upper secondary to tertiary level in Hong Kong. On top of this, VTC also offered 190 200 on-the-job training places for working adults during the year.

1.2 The purpose of this information note is to highlight the development of vocational education in Hong Kong since the 1970s. Specifically, it also traces the evolution of major categories of vocational schools in the education system, including former prevocational schools, secondary technical schools and skills opportunity schools ("SOSs"), which are mostly defunct after the implementation of education reforms in the late 1990s. As the research focus is vocation education for students, this information note will not go into vocational training for existing workforce unless necessary.¹

2. Development of vocational education in Hong Kong since 1970s

2.1 Hong Kong faced an acute shortage of skilled workers amidst its rapid industrialisation since the late 1950s. In response, the Government set up

¹ At present, VTC, Construction Industry Council (CIC), Clothing Industry Training Authority (CITA) and the Employees Retraining Board (ERB) are the four statutory bodies involved in VET. However, as CIC, CITA and ERB are largely responsible for in-service training and their scale of operation is small relative to VTC, they are not discussed in detail in this information note.

the Industrial Training Advisory Committee in 1965 and the Hong Kong Training Council in 1973 to study means to increase provision of vocational education for youngsters. These resulted in the first stage of proliferation of vocational education in the 1970s, as manifested in:

- (a) establishment of the then Hong Kong Polytechnic in 1972;
- (b) establishment of four new technical institutes in the late 1970s, on top of the existing technical institute at Morrison Hill, to provide vocational education at craft to technician levels;²
- (c) establishment of the Construction Industry Training Authority and the Clothing Industry Training Authority in 1975 for meeting the specific training needs in these two industries; and
- (d) enactment of the *Apprenticeship Ordinance* in 1976, offering contractual protection to apprentices in designated trades.

2.2 In 1982, the Government set up VTC under the *Vocational Training Council Ordinance* to promote vocational education in Hong Kong. Unlike its predecessors which were largely advisory bodies, VTC is a permanent and statutory body vested with administrative powers and financial support from the Government. This led to the second stage of proliferation of vocational education in Hong Kong, including the establishment of three more technical institutes in 1986-1987. As a result, the number of full-time students enrolled in 16 disciplines of the eight technical institutes of VTC more than tripled within a decade, from 3 700 in 1982 to over 12 000 in 1992.³

2.3 Turning to the 1990s, local vocational education faced new challenges, due to progressive relocation of manufacturing operation from Hong Kong to the Mainland and the resultant structural change in the local economy towards service-based activities. VTC responded by shifting its training focus from manufacturing to services on the one hand, and by

² Technical institutes were administered by the Education Department, offering vocational education at craft and technician levels to enrolled students. The first technical institute, namely Morrison Hill Technical Institute, was set up in 1969. Four more were established in the 1970s, at Kwun Tong (1975), Kwai Chung (1975), Haking Wong in Cheung Sha Wan (1977) and Lee Wai Lee (1979) respectively.

³ These disciplines included technical ones (e.g. applied science, clothing industry, computing studies, and electrical engineering) and non-technical ones (e.g. commercial studies, design, hotel and tourism). For more details on the development history of VTC, please refer to VTC (2007).

upgrading the skill content from craft to technician and higher technician levels on the other. It set up two Technical Colleges in 1993 to take over the Higher Diploma and Higher Certificate courses previously offered by the Hong Kong and City Polytechnics, followed by merging all technical institutes and technical colleges together to establish the Hong Kong Institute of Vocational Education ("IVE") in 1999. As such, vocational education offered by VTC was extended to post-secondary level.

2.4 Ever since 2000, VTC has stepped up its advancement efforts towards post-secondary education and professional training, in parallel with the development of Hong Kong as a knowledge-based economy in the new millennium. This marks the third stage of proliferation of vocational education. Major developments included:

- (a) setting up the School for Higher and Professional Education ("SHAPE") for lifelong learning and additional education progression pathways for students at various levels in 2003. Arrangement with local and overseas universities was made for offering top-up degrees for Higher Diploma graduates;
- (b) setting up the Institute of Professional Education And Knowledge ("PEAK") in 2003 to provide in-service training for working adults;
- (c) setting up of the Technological and Higher Education Institute of Hong Kong ("THEi") in 2012, offering vocationally-oriented bachelor degree programmes for local students; and
- (d) setting up the Chinese Cuisine Training Institute ("CCTI") in 2000 and constructing the new campus of the International Culinary Institute ("ICI") scheduled for completion in 2016, offering structured training to promote development of internationalised culinary industry in Hong Kong.

3. Current situation of vocational education in Hong Kong

3.1 At present, VTC has altogether 13 member institutions, including SHAPE, PEAK, THEi, IVE, CCTI and ICI (**Table 1**). They offer not only vocational education for school leavers of secondary 3-6 level, but also post-secondary programmes in their further study. Through these member institutions, VTC offers education and training places of 250 000 annually. Within this total, 24% is pre-employment education for students, while 76% is for in-service training.

Table 1 — Member institutions of VTC in 2015

| | Name of institutions | Year of establishment | Programmes |
|-----|---|------------------------------|---|
| 1. | THEi | 2012 | Vocationally-oriented bachelor degree programmes for local students. |
| 2. | PEAK | 2003 | Professional development courses and postgraduate programmes for working adults, in collaboration with overseas universities and local institutions. |
| 3. | SHAPE | 2003 | Top-up degrees for Higher Diploma graduates who wish to pursue further studies, in collaboration with overseas and local universities. |
| 4. | IVE⁽¹⁾ | 1999 | Nine campuses in the territory offering certificates to higher diplomas for a wide range of disciplines and industries. |
| 5. | Hong Kong Design Institute | 2007 | Higher diplomas to top-up degrees in creative industries. |
| 6. | ICI⁽²⁾ | 2014 | Certificate to higher diplomas for leavers of lower to upper secondary education in the culinary industry. |
| 7. | CCTI | 2000 | Training in Chinese culinary skills and catering management for both beginners and practising chefs. |
| 8. | Hospitality Industry Training and Development Centre | 1984 | Certificates and diplomas for leavers of lower to upper secondary education for training in hotels and catering sectors. |
| 9. | Pro-Act | 1985 | Ten development and training centres in various industries providing practical training and apprenticeships at various levels for graduates of secondary education. |
| 10. | Maritime Services Training Institute | 2003 | Certificates to higher diplomas for leavers of lower to upper secondary education. |
| 11. | Youth College⁽³⁾ | 2004 | Eight campuses in the territory offering Diploma in Vocational Education for leavers with lower secondary education or above. |
| 12. | Integrated Vocational Development Centre | 2008 | Five development centres offering in-service training for working adults with diverse educational backgrounds. |
| 13. | Shine Skills Centres | 1968-1995 | Three centres offering dedicated skills training and support services for people with disabilities or special education needs. |

Notes: (1) IVE has nine campuses in the territory. They are located in Chai Wan, Morrison Hill, Cheung Sha Wan, Kwai Chung, Kwun Tong, Tseung Kwan O, Sha Tin, Tsing Yi and Tuen Mun.

(2) While campus of ICI is still under construction and is scheduled for completion in 2016, it had already admitted the first cohort of students in 2014-2015.

(3) The Youth College has eight campuses in the territory. They are located in Kowloon Bay, Kwai Chung, Pokfulam, Kwai Fong, Tuen Mun, Tseung Kwan O, Po Lam and Tin Shui Wai.

Source: VTC, official web-site.

3.2 At the basic end of vocational education, school leavers at secondary 3-6 level can enroll in programmes of (a) Basic Craft Certificate; (b) Technician Foundation Certificate; or (c) Diploma in Vocational Education ("DVE") offered by the Youth College, various Pro-Act Training and Development Centres and IVE. There are three main specialised vocational programmes under DVE, namely "business and services", "engineering" and "design and technology".⁴ The study duration of these programmes lasts for one to four years, depending on the entry qualification of the students. On completion of these courses, craft and foundation certificates are equivalent to Level 2 in the context of the local Qualifications Framework ("QF") introduced in 2008, while DVE is one grade higher at Level 3 (**Table 2**).

Table 2 — Level of Qualification of selected VTC programmes in Hong Kong

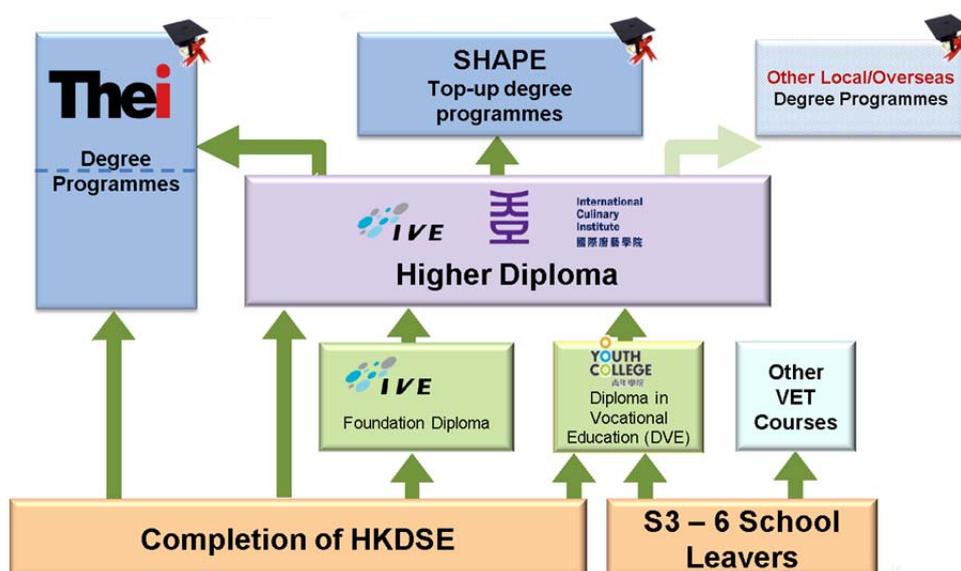
| QF Level | Award titles | VTC certificate or diploma |
|----------|----------------------------------|--|
| Level 7 | Doctor | - |
| Level 6 | Master | Master degree, Postgraduate diploma or certificate |
| Level 5 | Bachelor | Bachelor degree |
| Level 4 | Associate degree, Higher diploma | Higher Diploma |
| Level 3 | Diploma | Diploma in Vocational Education |
| Level 2 | Foundation Certificate | Basic Craft Certificate, Technician Foundation Certificate |
| Level 1 | | Certificate |

Source: VTC.

3.3 On progression pathways, holders of DVE can proceed to study in higher diploma programmes offered by a number of member institutions of VTC and the curriculum usually lasts for two years. On completion of the study, higher diplomas are equivalent to associate degrees or Level 4 in the QF, or higher technician in terms of skill level. Holders of higher diplomas can pursue further study to attain bachelor degrees through THEi and SHAPE within VTC, enriching the progression pathways of VET graduates (**Figure 1**).

⁴ The vocational subjects are wide ranging, including business, beauty care, hairdressing, automotive technology, building service engineering, computer-aided engineering, construction, aircraft engineering, information technology, jewellery arts and design, fashion design, etc.

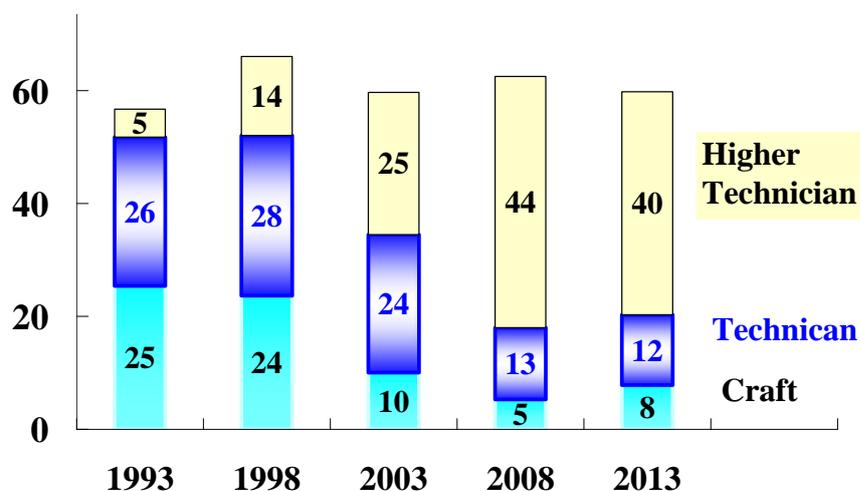
Figure 1 — Progression pathways of VTC graduates



Source: Progression ladder, VTC.

3.4 Indicative of continued upgrading of skill content in the curriculum of VTC over the past decades, the proportion of VTC students taking higher technician courses (both part-time and full-time) in overall VTC students increased by more than six-fold within the past two decades, from just 9% in 1993-1994 to 66% in 2013-2014. By contrast, the respective ratio for students taking craft courses originally designed for leavers of lower secondary education fell sharply over the same period, from 45% to 13% (**Figure 2**).

Figure 2 — Number of vocational students enrolled in VTC ('000)



Notes: Craft courses are courses beyond secondary 3 level, while higher technician courses are courses at higher diplomas or above level.

Source: Annual Digest of Statistics, Census and Statistics Department.

3.5 On apprentice training, VTC is still running the apprenticeship scheme under the *Apprenticeship Ordinance* enacted in 1976.⁵ Some 4 000 apprentices were being trained in more than 100 trades in 2013-2014. This apart, VTC has launched few pilot apprenticeship schemes in specific sectors in the more recent years, in collaboration with the Government to promote vocational education in Hong Kong. They include:

- (a) **Pilot Training and Support Scheme:** The scheme is intended to integrate apprenticeship training with career pathways to retain talents for specific industries subject to keen demand for labour. These industries include (i) electrical and mechanical trades of the construction industry; (ii) printing industry; and (iii) clock and watch industry. Training lasts for four years, with full-time study in the first year and part-time study amidst on-the-job training in the second to fourth years. Trainees are guaranteed with salary and granted incentive allowance during the training period.⁶ The Scheme is expected to commence in 2014-2015, benefiting some 2 000 students in total;
- (b) **Pilot Traineeship Scheme:** The scheme was launched in late 2011 mainly for service sectors, starting from beauty care and hairdressing services. It integrates on-the-job training in the workplace with structured vocational education programmes offered by the VTC. Some 300 trainees were enrolled in October 2013; and
- (c) **Retail Earn and Learn Pilot Scheme:** In the light of the tight manpower situation in the retail sector and in collaboration with the Hong Kong Retail Management Association, VTC has rolled out the pilot "Earn-and-Learn" scheme for the retail sector in 2014-2015. The on-the-job training programmes lasts for 18 months for a foundation diploma and 30 months for a higher diploma. While the government will provide an average

⁵ The *Apprenticeship Ordinance* was enacted in 1976, offering protection to apprentices in Hong Kong. Employers who wish to employ youngsters aged below 18 in one of the designated trades must enter into a contract with the employer. The contract must be registered with VTC, the Director of Apprenticeship.

⁶ Taking electrical and mechanical industry as an example, employers would offer an allowance of HK\$2,800 per person for 11 months to students in their first year of study in VTC's craft-level programmes. In addition, the Government would offer students an average monthly allowance of HK\$2,000 during the second to fourth years of the studies, if the employers were committed to paying a minimum monthly salary of HK\$8,000 to students under apprenticeship training and a minimum of HK\$10,500 upon their graduation.

monthly incentive allowance of HK\$2,000 to each student-worker, employers need to pay the tuition fee subsidy and guarantee minimum wage payment to the student-worker.⁷

3.6 Moreover, vocational education is partly embedded in the new curriculum of senior secondary education introduced in 2009. Secondary 5-6 students can now choose one or two "Applied Learning" courses which have more emphasis placed on vocational fields as their elective subjects for the Hong Kong Diploma of Secondary Education ("HKDSE"). In 2014/15, 36 Applied Learning courses in six different areas were offered to about 10 000 students in 320 schools.⁸ Yet it is noted that just 4 330 candidates registered in Applied Learning subjects in the 2014 HKDSE Examination, accounting for around 5% of overall candidates. For those students getting an attainment grade in Applied Learning subjects, the qualification can assist their enrolment in the relevant specialized fields in tertiary institutions. Moreover, as some of these Applied Learning subjects have also been quality assured for recognition as QF Level 3 under a pilot exercise, this may assist the students concerned to work in the relevant industries.⁹

4. Transformation of prevocational schools in late 1990s

4.1 Former prevocational schools were first set up in 1969, targeting primary school leavers mostly aged below 14 who were too young to join the labour market by then. The curriculum of prevocational schools lasted for three years initially, comprising 50% academic training and 50% practical subjects. It was extended to five years in 1981, with the proportion of practical/technical content for the newly created two-year senior classes stipulated at 30%. Graduates of senior classes were intended to pursue

⁷ Under the pilot training scheme for the retail sector, participating employers need to provide on-the-job training on the one hand, and sponsor tuition fees of the student-workers payable to the VTC (HK\$1,100-HK2,500 per month for each student-worker in 2015-2016) on the other. Employers also guarantee a certain level of remuneration during training (an average of HK\$4,900-HK5,500 a month for three-day work every week in 2014-2015). If the student-workers are to become full-time employees of the companies concerned upon graduation, employers will offer a salary no less than HK\$11,000-HK13,000 per month, depending on the qualification obtained.

⁸ The six areas of studies in Applied Learning include (a) creative studies; (b) media and communication; (c) business, management and law; (d) services; (e) applied science; and (f) engineering and production.

⁹ Amongst 40 Applied Learning courses in the 2015-17 cohort, 12 have been quality assured for recognition under QF (QF Level 3), as a pilot exercise. The Government is exploring further quality accreditation of such Applied Learning courses in the near future.

technician programmes in technical institutes under VTC. That said, prevocational schools took up a very small share in local secondary education. Take 1995-1996 as an example, there were only 4 280 prevocational students at the secondary 3 level in Hong Kong, accounting for just 5% of the respective student population in Hong Kong.

4.2 Ever since 1992, the curriculum of prevocational schools was further extended to the sixth form, and students could take the Hong Kong Advanced Level Examination to pursue tertiary education. As such, the distinction between three types of secondary schools (i.e. grammar, technical and prevocational) were somewhat blurred. This precipitated a policy review on the functions of prevocational schools by the Education Department in 1996, taking note of (a) reluctance of parents to accept prevocational schools having equally viable alternative to grammar schools; (b) practical and technical subjects taught at prevocational schools considered to be obsolete in the modern age; and (c) students of lower secondary level of prevocational schools not keen to pursue craft courses at VTC upon graduation.

4.3 In March 1997, the Government released the report entitled "Review of Prevocational and Secondary Technical Education", recommending revision of the curriculum of 27 prevocational schools in the light of "structural change in our manufacturing industry" and "changing community needs". The key recommendations included:

- (a) while prevocational schools might continue to offer an alternative form of secondary education against grammar schools, they needed to substantially amend its curriculum amidst "rapid technological advancement and economic globalization";
- (b) new curriculum should not be prevocational or job-specific in nature anymore, but a broader one with emphasis on "business and technological subjects" as well as on generic and transferable skills; and
- (c) prevocational schools should thus be given the option to remove the reference of "prevocational" from their registered names, subject to the approval of the Education Department.

4.4 In the light of this policy change, former prevocational schools had progressively transformed their curriculum and moved closer to generic education. Moreover, they had changed their names by removing the pre-fix "prevocational" since 1997. For instance, CMA Prevocational School was renamed as CMA Secondary School in 1997. Accordingly, prevocational schools have thus quietly retreated from public attention over the past decade.

5. Transformation of secondary technical schools

5.1 The evolution of secondary technical schools is broadly similar to prevocational schools. It originated from the establishment of Junior Technical School in the 1930s, with a three-year curriculum designed for students pursuing technician career in the future. The curriculum was subsequently extended to five years in 1957, and further to matriculation classes since the mid-1960s, blurring the positioning of technical schools against grammar schools. Moreover, the ratio of "cultural, practical and technical" content in the curriculum of secondary technical schools was only 25-30% in the 1990s, not much different from the respective ratio of about 15-20% in the secondary grammar schools. In 1995-1996, there were 3 687 students at the form-three level in secondary technical schools, taking up 5% of the respective student population in Hong Kong.

5.2 In the same policy review report released in 1997 over secondary technical education as discussed in paragraph 4.3, the Government noted that there was a lack of "marked differences between secondary technical and grammar schools" and came up with the following recommendations:

- (a) secondary technical schools should transform the curriculum of its technical and practical subjects, though their proportion in the overall curriculum could be retained. Out-dated subjects (e.g. metalwork) should be removed and replaced by "new business and technological subjects";
- (b) the syllabuses of "Design and Technology" should be revamped, focussing on application of information technology in learning activities in a modernised workshop; and

- (c) secondary technical schools had the option to remove the reference of "technical" from their registered names, subject to the approval of the Education Department.

5.3 In accordance with these recommendations, 19 former secondary technical schools have progressively changed their curriculum since the late 1990s, incorporating new subjects such as "information and communication technology", "visual arts" and "business, accounting and financial Studies". Also, most of these schools have removed the word "technical" from their names. For instance, Tang Shiu Kin Victoria Technical School was renamed as Tang Shiu Kin Victoria Government Secondary School in 1997. However, there are a few exceptions as some technical schools prefer to retain their existing names. They in particular include Aberdeen Technical School and Kowloon Technical School.

6. Mainstreaming of skills opportunity schools after 2000

6.1 Former SOSs were a sort of special education created in the 1990s for students with severe learning difficulties. In the Report on "The Curriculum and Behavioural Problems in Schools" released in 1990, the Education Commission proposed to set up SOSs for those lower secondary students with learning problems. The curriculum of SOSs was designed in such a manner that students could develop practical skills through vocational subjects (e.g. woodwork and metalwork), assisting them to become self-sufficient individuals in society. SOS graduates could further their training at operative level in skills centres run by VTC. The class size of SOSs would be capped at around 20 students to facilitate more attention and support from the teachers to students.

6.2 Between 1993 and 1998, the Government set up altogether seven aided SOSs, with its curriculum comprising 60% academic subjects and 40% "cultural, practical and technical subjects".¹⁰ However, response to SOSs was rather mixed, with a take-up rate of less than 70% for the 1 400 available

¹⁰ These seven SOSs were The Church of Christ in China Nim Tsi School, Yuen Long Catholic Secondary School, Fortress Hill Methodist School, Yan Chai Hospital No. 5 Secondary School, Chi Lin Buddhist Secondary School, Po Leung Kuk Tsing Yi Secondary School and Tung Wah Group of Hospitals Mr & Mrs Kwong Sik Kwan College.

school places in November 1998.¹¹ In the meantime, the Board of Education set up a Sub-committee on Special Education ("the Subcommittee") to review the effectiveness in respect of special education, including SOSs.

6.3 In 2000, the Sub-committee recommended that the Government should make arrangement to enable students with special educational needs to study in ordinary schools, rather than segregated settings like SOSs. This policy change took account of the global trend of integrated education. With enhanced teacher training and curriculum reform (such as graded learning schedules for students with learning difficulties), all SOSs should be mainstreamed eventually.

6.4 In accordance with these recommendations, SOSs underwent a structural change in the subsequent years. Amongst the seven former SOSs, some of them had already ceased operation, while three were reported to have completed mainstreaming by now. Special arrangements were made to support the students in the mainstreaming process, including:

- (a) allocating fewer students per class compared to ordinary secondary schools;
- (b) adapting curricular to cater for diverse learning needs;
- (c) offering practical subjects to students, such as catering services, business fundamentals, tourism and hospitality, health and beauty keeping;
- (d) extending the three-year curriculum to six-year curriculum; and
- (e) providing extra resources and professional support to the ex-SOSs.

6.5 As a result of the mainstreaming policy, SOSs also retreated from public attention over the past decade or so. Students with severe learning difficulties can now study in a more integrated setting, with dedicated support from the Government.

¹¹ Audit Report (1999).

7. Conclusion

7.1 Pursuant to an initiative in 2014 Policy Address, the Government has set up the Task Force on Promotion of Vocational Education ("Task Force") in June 2014, with a view to guiding "the younger generation in choosing their career". On 6 July 2015, the Task Force completed the study and submitted a report to Government, which is considering the feasibility of the strategies and recommendations therein for subsequent policy formulation and implementation.

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