CHAPTER 7

Education Bureau
Vocational Training Council

Hong Kong Design Institute

Audit Commission
Hong Kong
27 October 2017

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 69 of the Director of Audit contains 9 Chapters which are available on our website at http://www.aud.gov.hk

HONG KONG DESIGN INSTITUTE

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HONG KONG DESIGN INSTITUTE

Executive Summary

1.   The Vocational Training Council (VTC) is a statutory body established in 1982 to provide vocational and professional education and training in Hong Kong. The VTC's training courses leading to formal qualifications are funded by the Education Bureau (EDB). The Hong Kong Design Institute (HKDI) is one of the 13 member institutions of the VTC. Prior to the establishment of the HKDI, the VTC's design-related Higher Diploma (HD) programmes were offered by the Hong Kong Institute of Vocational Education (IVE) at different campuses. In February 2006, the VTC proposed to bring together its three design-related departments of the IVE in five IVE campuses by accommodating them in the dedicated HKDI on a single, purpose-built campus.   The proposal also included the reprovisioning of the ageing infrastructure of IVE (Lee Wai Lee) (IVE(LWL)) on a site adjacent to the HKDI. In June 2007, the Finance Committee (FC) of the Legislative Council (LegCo) approved funding of $992.8 million in September 2006 prices, which was equivalent to $1,006.3 million in money-of-the-day prices, for the construction of a new VTC campus in Tiu Keng Leng (hereinafter referred to as the Tiu Keng Leng Campus (TKL Campus)) accommodating the HKDI and IVE(LWL). The actual construction cost incurred for the TKL Campus was $1,287.3 million. The new campus was put into use in 2010/11 (unless stated otherwise, all years mentioned hereinafter refer to academic years). In 2016/17, the four academic departments of the HKDI had 185 teaching staff and offered 21 full-time two-year HD programmes (comprising 19 subvented and 2 self-financed programmes) to secondary school leavers. The total number of students enrolled was 5,476. The Audit Commission (Audit) has recently conducted a review of the HKDI.

Management of programmes

2.   ***Over-enrolment of new students and high percentage of short contract staff.*** There was over-enrolment of Year 1 new students in many programmes in the past years. In 2013, a Programme Board of the HKDI expressed concern on the situation of student over-enrolment of its programmes and suggested that over-enrolment should be avoided in order to ensure the teaching quality and to prevent oversupply of graduates in the market and in the industry. In 2016/17, 13 of the 21 programmes were over-enrolled. Teaching staff establishment is revised based

on actual enrolment. The total teaching staff establishment of the HKDI increased by 23, 20 and 16 in 2014/15, 2015/16 and 2016/17 respectively due to over-enrolment. Of the 59 additional teaching staff posts, 55 were filled by staff with a contract duration of one year or less (hereinafter referred to as short contract staff). It was stipulated in the instruction issued by the VTC Headquarters that the posts of short contract staff should not exceed 15% of the total number of teaching posts in accordance with the approved programme plan. Due to over-enrolment of students, the overall percentages of short contract staff were 25%, 26% and 25% for 2014/15, 2015/16 and 2016/17 respectively. In 2016/17, for three academic departments, the percentages were 41%, 30% and 17% respectively (paras. 2.3, 2.4, 2.9 and 2.10).

3.   ***Need to provide more analysis in programme proposals and conduct manpower survey on design industry.*** In the period 2012/13 to 2016/17, there were 14 new programmes. Before a new programme is introduced, a programme proposal will be prepared outlining the details of the programme. The proposal will be submitted to the VTC Design Discipline Academic Committee for endorsement and to the VTC Vocational Education and Training Academic Board for approval. Audit reviewed the programme proposals for five new programmes and found that some planning information should be added, for example: (a) no information was included in the programme proposals on how the planned numbers of student enrolment were derived; and (b) no details were included in the proposals on the impact on teaching staff resources. Moreover, Training Boards of the VTC conduct regular manpower surveys and publish manpower reports for various industries. However, manpower needs of some programmes offered by the HKDI are not covered by the manpower surveys of the Training Boards. In the Design Discipline Advisory Board meeting held in November 2011, members considered that a formal manpower survey on design industry would provide better understanding on the manpower requirement in design sector and the findings would be useful to the development of HKDI's programmes. Up to July 2017, no manpower survey on the design industry had been conducted (paras. 2.13 to 2.15 and 2.17 to 2.19).

4.   ***Evaluation of programme performance.*** The performance of the HKDI's programmes is measured against seven indicators, viz. enrolment rate, retention rate, pass rate, employment rate, further study rate, student satisfaction and employer satisfaction (para. 2.22). Audit noted that:

Executive Summary

(a) ***Need to monitor completion rates of programmes.*** The VTC reported the retention rates of modules of its HD programmes (i.e. the weighted average of the retention rates of the individual modules of the programme) but not the completion rate of its HD programmes (i.e. the graduation rate of a cohort of students for the two-year HD programmes). The module retention rates were considerably higher than the programme completion rates because some students might have completed the modules they had started but not completed all the required modules for the programme (paras. 2.22 to 2.24);

(b) ***Low completion rates.*** The completion rates of some programmes were low (para. 2.26);

(c) ***Target employment rate not met.*** The overall employment rate for graduates of the HKDI's HD programmes was 86.4% in 2016 and had been lower than the target employment rate of 90% set by the VTC since 2012. In particular, the employment rates for graduates of four programmes had not achieved the 90% target in every year of 2014 to 2016 (paras. 2.28 and 2.29); and

(d) ***Room for improvement in conducting employer satisfaction surveys.*** The employer satisfaction surveys conducted for graduates of 2014 and 2015 only covered a small number of employers of HKDI graduates. Some programmes were not covered in the surveys. For those programmes covered in the surveys, only a small number of employers were surveyed for each programme, ranging from 1 to 6 (para. 2.38).

5. ***Need to improve the extent of performance reporting.*** The VTC discloses on its website various information/statistics (e.g. number of enrolment, number of graduates and employment rate) of the HKDI together with some other member institutions as a whole. Moreover, the VTC discloses on its website the employment rate of HD programme graduates and the number of HD programmes graduates successfully articulated to full-time degree programmes. However, there was no information on the number of graduates who were employed and those who were seeking employment, and the percentage of graduates who successfully articulated to full-time degree programmes (paras. 2.42 and 2.43).

6.   ***Need to arrange more relevant industrial attachment.***   Industrial attachment (IA) has been included as a mandatory graduation requirement of all HD programmes starting from the 2012/13 intake. There are four categories of IA. Audit noted that: (a) Category A, i.e. attachment in field or industry relevant to the programme of study, is the most preferred category of IA. In the period 2012/13 to 2015/16, while the number of Category A of IA for the HKDI students increased from 710 to 1,282, the proportion of this Category decreased from 70% (i.e. 710 out of 1,015) to 52% (i.e. 1,282 out of 2,477), compared to the corresponding figures for the average of all VTC HD programmes ranging from 82% to 86% in the same period; and (b) the minimum duration of IA for some HD programmes in design discipline offered by two other tertiary institutions were much longer than that by the HKDI (paras. 2.46, 2.47 and 2.50).

Campus development and management

7.   ***Different views on project cost of winning design of HKDI.*** In April 2006, the VTC organised a design competition for the HKDI. Contestants were required to keep their project costs strictly within the budget of $378 million. However, the cost estimate of the winning design was $470.4 million. The design included a number of cost saving options which, according to the contestant, could reduce the cost estimate by $93 million to $377.4 million. On 10 November 2006, the Jury Panel made its final adjudication and recommended the winning design. On 13 November 2006, the VTC Council Secretariat sought the endorsement of the VTC Estates Committee and approval of the VTC Standing Committee on the recommendation of the Jury Panel. The Committees were informed that, taking into account the cost saving options and the views of the Technical Committee for the competition, the revised cost estimate was $405 million, which exceeded the construction budget for the design competition of $378 million. On 20 November 2006, the Standing Committee and the Estates Committee held a joint meeting to ratify the Jury Panel's recommendation. However, there was no documentary evidence showing that the Jury Panel was informed of the assessment made by the Technical Committee on the cost saving options included in the winning design on 10 November 2006 when the Panel made its final adjudication (paras. 3.4 to 3.6, 3.8 and 3.9).

8.   ***Project development of HKDI.*** In the project development stage of the HKDI, various structural schemes, i.e. steel primarily (Steel Scheme), reinforced concrete primarily (RC Scheme), and a mix of steel and reinforced concrete (modified Hybrid Scheme), were considered by the VTC. No documentary evidence was available to show that the schemes had been thoroughly discussed and that the

modified Hybrid Scheme had been well justified (paras. 3.13, 3.15 and 3.25). Audit observed that:

(a) ***Application for funding from FC not based on modified Hybrid Scheme which was adopted for construction.*** According to the VTC's guidelines, before funding application can be submitted to LegCo, the VTC needs to submit architectural design and costing to the Architectural Services Department (ArchSD) for approval. In the preparation of the funding application to the FC, the VTC submitted the project cost estimate of $992.8 million based on the RC Scheme to the ArchSD for vetting in March and April 2007. However, on 30 April 2007, the VTC adopted the modified Hybrid Scheme. No documentary evidence was available showing that the VTC had submitted any revised cost estimate to the ArchSD to take into account the fact that the modified Hybrid Scheme was adopted. On 15 June 2007, the project consultant revised the project estimate from $992.8 million to $1,064.1 million based on the modified Hybrid Scheme. There was no documentary evidence showing that the VTC had submitted the revised project estimate of $1,064.1 million to the ArchSD. In the event, the project cost estimate quoted in the funding application paper submitted to the FC on 22 June 2007 was $992.8 million indicating the adoption of the RC Scheme (paras. 3.16 and 3.17);

(b) ***RC Scheme not followed.*** In November 2006, when the VTC Standing Committee and the VTC Estates Committee ratified the recommendation of the Jury Panel, the winning design was based on the RC Scheme. Moreover, the project cost estimate submitted by the VTC for vetting by the ArchSD in March 2007 and the project estimate approved by the FC in June 2007 was based on the RC Scheme. Notwithstanding this, the HKDI was eventually built using the modified Hybrid Scheme (para. 3.22);

(c) ***More accurate information should have been provided to the VTC Council and the committees.*** At a joint meeting of the Standing Committee, Estates Committee and Steering Committee of the VTC held in February 2008, it was reported that the drawings of the RC Scheme had not yet been cleared by the Buildings Department. Audit noted that the three Committees were not informed that the project team had not submitted the drawings of the superstructure based on the RC Scheme to the Buildings Department for clearance (para. 3.24); and

(d)   ***Project progress reports not submitted to EDB.***   After approval of FC funding, the EDB had not required the VTC to submit progress reports together with updated budget forecasts and outturn income and expenditure statements at quarterly intervals for the TKL Campus development project according to Financial Circular No. 9/2004 (paras. 3.28 and 3.29).

9.   *Management of campus.*   Audit noted the following issues:

(a)   ***Tennis court not open to the public.***   In June 2007, when seeking funding from the FC of LegCo for the construction of the new TKL Campus, the EDB informed the FC that student sports and amenity facilities (i.e. swimming pool, basketball courts, tennis court and gymnasium) at the new campus would be open to the public during non-school hours. However, the tennis court had not been open to the public (paras. 3.35 and 3.36);

(b)   ***Incorrect utilisation rates.***   The HKDI periodically calculated the utilisation rates of teaching venues for management information.   For some of the teaching venues, the utilisation rates reported were overstated (para. 3.38);

(c)   ***Room for increasing the use of the Auditorium for event rental.***   For the period from 2013/14 to 2016/17, Audit noted that, for 81 to 129 days a year, the Auditorium was closed for maintenance, and usage of the Auditorium by external parties was on the low side, ranging from 2 to 10 days a year (para. 3.39); and

(d)   ***Malfunction of lifts and escalators.***   There are 13 lifts and 4 escalators (2 long ones and 2 short ones) at the TKL Campus.   The number of breakdown cases of lifts and escalators had increased by 174% from 53 cases in 2014 to 145 cases in 2016.   All three routine maintenance and service contracts of the lifts and escalators stipulate that the monthly system service availability shall be maintained at at least 99%.   The service availability records were not available and the HKDI had not monitored the system service availability.   Audit analysis of the log books revealed that the monthly system service availability of 4 escalators had decreased from 99.7% in January 2015 to 71.0% in June 2017.   In the absence of suitable roof and enclosure, the services of the two short escalators needed to be suspended during rainy days or adverse weather conditions.   Audit examined the service records for the period from 1 January 2017 to

30 June 2017 and noted that the 2 short escalators were suspended from operation in 21.2% of the available operating time because of adverse weather. One long escalator had been suspended from operation since 31 March 2017 due to a contractual dispute with the contractor (paras. 3.44 to 3.47, 3.49 and 3.50).

Administrative issues

10. ***Inadequacies in inventory management.*** According to the VTC's requirements, annual stocktaking should be conducted in each financial year. In the 7-year period 2010-11 to 2016-17, stocktaking had not been conducted for three financial years 2010-11, 2012-13 and 2014-15. Stocktaking exercise for financial year 2016-17 was pending as at September 2017. Moreover, a long time had been taken to complete the three stocktaking exercises for 2011-12, 2013-14 and 2015-16. A total of 810 inventory items of original cost of $2.7 million were found missing in the three annual stocktaking exercises for 2011-12, 2013-14 and 2015-16 (paras. 4.3 to 4.6).

11. ***Campus environmental targets not met.*** Using the 2013/14 as the reference year, the Corporate Environmental Office of the VTC Headquarters set the following campus environmental targets for a two-year review period from 2014/15 to 2015/16: (a) 5% reduction on water consumption; (b) 5% reduction on electricity consumption; and (c) 5% reduction on quantity of paper ordered. Audit noted that the last two of the three environmental targets were not achieved. In April 2016, in order to review energy consumption and improve energy efficiency, the VTC engaged a consultant to conduct an energy audit. In November 2016, the consultant identified several energy saving opportunities to enhance the energy performance. Up to September 2017, the recommendations of the consultancy report were still being followed up by the Safety, Health and Environment Task Force and Central Committee on Safety, Health and Environment (paras. 4.19, 4.20, 4.22, 4.23 and 4.25).

Audit recommendations

12. **Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in the Executive Summary. Audit has *recommended* that the Executive Director, VTC should:**

Management of programmes

(a)   ensure as far as possible that the number of students enrolled should not exceed the plan by a significant margin and any significant deviation from the plan should be fully justified (para. 2.11(a));

(b)   take measures to plan the teaching staff requirement more accurately and to address the high percentage of short contract staff (para. 2.11(d));

(c)   include in the programme proposals more details on the planned number of student intake and impact on teaching staff (para. 2.20(a));

(d)   consider conducting a manpower survey on the design industry periodically and take into account the results of the survey in its programme planning and review (para. 2.20(b));

(e)   consider monitoring the programme completion rates in addition to the module retention rates (para. 2.40(a));

(f)   ascertain the reasons for lower completion rates of some programmes and identify areas for improvement (para. 2.40(b));

(g)   take measures to improve the employment rate of HKDI graduates with a view to meeting the target employment rate of 90% (para. 2.40(c));

(h)   review the criteria for selecting employers for the employer satisfaction survey and take measures to encourage graduates to give consent for the VTC to contact their employers (para. 2.40(e));

(i)   disclose the key performance information and statistics of the HKDI and the other member institutions separately, such as the enrolment

rate, completion rate, employment rate and employers' satisfaction on its graduates (para. 2.44(a));

(j)   disclose on its website information on the number and the percentage of HKDI graduates who successfully obtained employment and those who successfully articulated to full-time degree programmes (para. 2.44(b));

(k)   take measures to increase the proportion of Category A of IA for the HKDI's HD programmes (para. 2.51(a));

(l)   conduct a review on the minimum duration of IA for the HKDI's HD programmes and consider if there is merit in extending the minimum duration (para. 2.51(c));

Campus development and management

(m)   for future design competitions, if the competition requires the entry designs to fulfil the mandatory budget requirements, thoroughly assess the cost estimates submitted by the contestants before the Jury Panel made its final decision on the result of the competition (para. 3.10);

(n)   for future capital projects:

   (i)   provide up-to-date cost estimate to the ArchSD for comments in seeking funding from the FC of LegCo (para. 3.31(a));

   (ii)   enhance project information provided to the Council and the relevant committees to facilitate them to make informed decisions (para. 3.31(c)); and

   (iii)   take measures to ensure that before adopting a development scheme, the various schemes should be thoroughly discussed and the decision to adopt a particular scheme should be well justified and approved (para. 3.31(d));

(o)   further explore the feasibility of opening the tennis court to the public during non-school hours (para. 3.53(a));

(p)   **take measures to ensure the correctness of the utilisation rates of teaching venues (para. 3.53(b));**

(q)   **monitor the problem of repeated breakdown cases of the lifts and escalators and, if necessary, take action to address the problem (para. 3.53(f));**

(r)   **ensure that the contractor attain the performance target on maintenance services under the maintenance and service contract of escalators (para. 3.53(g));**

(s)   **explore whether any measures can be taken to increase the operating time of the two short escalators and endeavour to resume as soon as possible the service of the long escalator which had been suspended (para. 3.53(h) and (i));**

Administrative issues

(t)   **conduct annual stocktaking in a timely manner in each financial year according to the inventory guidelines (para. 4.10(a));**

(u)   **strengthen its inventory control to minimise loss of inventories (para. 4.10(b)); and**

(v)   **endeavour to achieve the campus environmental targets (para. 4.26(a)).**

13.   **Audit has also *recommended* that the Secretary for Education should, for future government subvented projects, in accordance with Financial Circular No. 9/2004, take measures to ensure that the VTC submits to the EDB project progress reports together with updated budget forecasts and outturn income and expenditure statements upon approval of capital subventions and thereafter at quarterly intervals (para. 3.32).**

Response from the VTC and the Government

14.   The Executive Director, VTC and the Secretary for Education agree with the audit recommendations.

PART 1: INTRODUCTION

1.1   This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2   The Vocational Training Council (VTC) is a statutory body established in 1982 to provide vocational and professional education and training in Hong Kong. The VTC is funded by government subvention under two bureaux, namely the Education Bureau (EDB) and the Labour and Welfare Bureau. Training courses leading to formal qualifications are funded by the EDB and industry-specific and subject-specific training courses of short duration and programmes which do not lead to formal qualifications are funded by the Labour and Welfare Bureau. In 2016-17, the subventions from the EDB and the Labour and Welfare Bureau were $2,767 million and $307 million respectively. The Hong Kong Design Institute (HKDI) is one of the 13 member institutions of the VTC (see Appendix A).

1.3   Prior to the establishment of the HKDI, the VTC's design-related Higher Diploma (HD) programmes were offered by the Hong Kong Institute of Vocational Education (IVE) at different campuses. The VTC considered such arrangement not conducive to students' learning and development. In February 2006, the VTC proposed to bring together its three design-related departments (i.e. (a) Design; (b) Fashion and Textiles; and (c) Printing and Digital Media) of the IVE in five IVE campuses by accommodating them in the dedicated HKDI on a single, purpose-built campus. It considered that the integration would pool resources and foster synergy among the design-related departments, and enhance the teaching and learning environment for the delivery of quality design education in Hong Kong. The proposal also included a plan to reprovision the ageing infrastructure of IVE (Lee Wai Lee) (IVE(LWL)) on a site adjacent to the HKDI.

1.4   In June 2007, the Finance Committee (FC) of the Legislative Council (LegCo) approved funding for the construction of a new VTC campus in Tiu Keng Leng (hereinafter referred to as the Tiu Keng Leng Campus (TKL Campus)) accommodating the HKDI and IVE(LWL). The HKDI was put into use in academic

Introduction

year 2010/11 (unless stated otherwise, all years mentioned hereinafter refer to academic years).

Academic programmes offered by the HKDI

1.5   The HKDI has four academic departments. The four departments are:

(a)   ***Department of Design Foundation Studies (DFS).*** The Department of DFS provides broad-based foundation studies for students to develop their interests, preferences and strengths, providing a solid foundation for progression to their study pathways;

(b)   ***Department of Communication Design and Digital Media (CDM).*** The Department of CDM provides programmes in the areas including Creative Media, Visual Communications, Transmedia and Advertising Design;

(c)   ***Department of Fashion and Image Design (FID).*** The Department of FID provides programmes in the areas including Fashion Design, Fashion Image Design and Fashion Business; and

(d)   ***Department of Product and Interior Design (PID).*** The Department of PID (Note 1) provides programmes in the areas including Product, Interior and Exhibition Design and Architectural Design.

1.6   In 2016/17, the four academic departments of the HKDI offered 21 full-time two-year HD programmes (comprising 19 subvented and 2 self-financed programmes) to secondary school leavers (see Appendix B). The total number of students enrolled was 5,476. The tuition fee for subvented programmes and self-financed programmes were $31,570 and $53,400 per student per year respectively. Table 1 shows the number of programmes offered and number of students enrolled by the four departments.

Note 1:   *The Department of PID was renamed the Department of Architecture, Interior and Product Design with effect from 2017/18.*

Table 1

**Number of programmes offered and students enrolled
(2016/17)**

	Academic department				Total
	DFS	**CDM**	**FID**	**PID**	**Total**
(a) Subvented programme					
No. of programmes	1	6	5	7 (Note)	19
No. of planned enrolment	118	1,781	870	1,393	4,162
No. of student enrolled	152	2,202	919	1,651	4,924
(b) Self-financed programme					
No. of programmes	-	1	1	-	2
No. of planned enrolment	-	287	338	-	625
No. of student enrolled	-	250	302	-	552
(c) Total (a)+(b)					
No. of programmes	1	7	6	7	21
No. of planned enrolment	118	2,068	1,208	1,393	4,787
No. of student enrolled	152	2,452	1,221	1,651	5,476

Source: Audit analysis of HKDI records

*Note: Students enrolled in HD in Product, Interior and Exhibition Design (Subject Group)
            in the first semester will progress to three programmes in the second semester,
            subject to their choice, academic performance and availability of places. Therefore
            the number of programmes in the second semester will be 9.*

*Remarks: Number of enrolment in this table refers to the total number of new enrolment of
          Year 1 and progressing enrolment of Year 2.*

1.7   There are two buildings located in the TKL Campus, namely the HKDI and
IVE(LWL).   The HKDI and IVE(LWL) share some facilities, for example, the
Learning Resource Centre, the Language Centre, the Student Development Office and
the sports facilities including the swimming pool and the fitness centre. The VTC
monitors the income and expenditure of the TKL Campus as a single accounting unit.
Income received and expenditure incurred by the TKL Campus are not allocated to

the HKDI and IVE(LWL) separately. For the financial year 2016-17, the TKL Campus received income of $257 million from programme fees, hire of accommodation and other sundry fees. The expenditure incurred was $456 million, comprising staff expenditure of $389 million and operating expenditure of $67 million (Note 2).

Professional Education and Engagement Centre

1.8   Apart from offering full-time design-related HD programmes to secondary school leavers, the HKDI also offers part-time training programmes through its Professional Education and Engagement Centre on a self-financed basis (see Appendix C). The programmes offered by the Centre include professional diploma/certificate courses and non-award-bearing seminars and workshops. In 2016/17, the Centre offered 24 professional diploma/certificate courses, 3 seminars and 12 workshops. The total number of students enrolled were 1,348. For the financial year 2016-17, the total income received by the Centre amounted to $5.4 million, whilst total expenditure incurred was about $4 million, comprising staff expenditure of $1.7 million and operating expenditure of $2.3 million.

Organisation of HKDI

1.9   As at 30 June 2017, the HKDI had an establishment of 560 staff, comprising a Principal (Note 3), two Vice Principals (Note 4), 256 teaching staff (Note 5),

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Note 2:   *The operating expenditure of $67 million did not include costs of the VTC's central administration and support services (for example, human resources and information technology services and major repairs and maintenance services).*

Note 3:   *The Principal of the HKDI also serves as the Principal of IVE(LWL).*

Note 4:   *The two Vice Principals are Vice Principal (Academic) and Vice Principal (Administration). They also oversee the operation of IVE(LWL).*

Note 5:   *The total number of teaching staff was 256, comprising 185 staff of the four academic departments (DFS, CDM, FID and PID — see para. 1.5), 2 for providing services to students with special education needs, 52 of the Language Centre and 17 of the Student Development Office. The 69 teaching staff of the Language Centre and the Student Development Office deliver modules on language and whole person development to students of both the HKDI and IVE(LWL).*

144 academic supporting staff and 157 administrative staff (Note 6). An organisation chart of the HKDI as at 30 June 2017 is shown at Appendix C.

1.10   As the HKDI is one of the 13 member institutions of the VTC (see para. 1.2), the VTC Headquarters is responsible for some management functions of the HKDI, such as:

(a)   hiring of staff with contract duration of more than one year and staff with open-ended contract;

(b)   processing procurement in excess of $50,000; and

(c)   major repairs and maintenance.

1.11   Various boards and committees are established under the governance structure of the VTC. The following boards/committees are pertinent to the operation of the HKDI (see Appendix D):

(a)   ***Vocational Education and Training Academic Board (VETAB).*** The VETAB is the academic governing body of the VTC. It sets the overall VTC academic policies, and oversees and approves all aspects of the VTC's academic activities. It also approves the annual programme plan which provides the number of planned enrolment for new intake and progressing intake of each programme;

(b)   ***Design Discipline Academic Committee (DEAC).*** The DEAC reports to the VETAB. It is responsible for the strategic development and academic management of the programmes with advice from the Design Institute Advisory Board (DIAB) and the Design Discipline Advisory Board (DEDAB) (see (e) and (f) below);

(c)   ***Design Discipline Quality Assurance Committee (DEQAC).*** The DEQAC oversees the implementation of the Quality Assurance System and makes recommendations to DEAC and appropriate boards and committees;

Note 6:   *The total number of administrative staff was 157, of whom 152 staff provide services to both the HKDI and IVE(LWL) and 5 staff provide services to the Professional Education and Engagement Centre of the HKDI.*

(d)   ***Programme Boards.***   There are four Programme Boards which are responsible for formulating procedures for the design, delivery and development of the HKDI programme curricula, setting academic standards, maintaining academic quality, and reviewing and evaluating the programmes regularly to ensure continuous improvement.   The four Programme Boards are CDM Programme Board, FID Programme Board, PID Programme Board (Note 7) and Visual Arts Programme Board;

(e)   ***DIAB.***   The DIAB gives advice and steering to the HKDI in providing design education, which include:

   (i)   advising on the manpower requirements of the design industry;

   (ii)   advising on and making recommendations to the DEAC on review of the developments of the HKDI; and

   (iii)   receiving a report annually from the DEDAB (see (f) below) on the programme planning and curriculum development; and

(f)   ***DEDAB.***   The DEDAB recommends to the VETAB on the academic management, which includes:

   (i)   strategic development for the programmes and services offered;

   (ii)   course planning, curriculum development and quality assurance of the programmes offered;

   (iii)   new programmes in emerging areas; and

   (iv)   articulation pathways for further studies and lifelong learning for HKDI graduates.

Note 7:   *The PID Programme Board was renamed the Architecture, Interior and Product Design Programme Board with effect from 2017/18.*

TKL Campus

1.12   In June 2007, the FC approved funding of $1,006.3 million for the proposed TKL Campus. In the paper seeking the FC's approval, the then Education and Manpower Bureau (Note 8) informed the FC that there was a need for the construction of the new campus (see Photograph 1) at Tiu Keng Leng to accommodate the new HKDI campus (see para. 1.3) and to reprovision IVE(LWL). The FC was informed that:

(a)   the new HKDI campus would provide facilities including design studios, television, film and audio studios, drawing rooms, workshops, and language and computer laboratories. The facilities would provide the necessary infrastructure to help the HKDI fulfil its mission to become a leading international provider of foundation studies and lifelong learning in design;

(b)   the ageing infrastructure of IVE(LWL) campus located in Kowloon Tong required upgrading in order to support a modernised provision of vocational education and training;

(c)   IVE(LWL) offered courses in relation to jewellery, watches and clocks, and optics industries, which required design and technology to drive their growth and development. Putting the HKDI and IVE(LWL) campuses on adjacent sites would help achieve better synergy among the various academic disciplines and departments of the IVE; and

(d)   the HKDI, together with the related IVE(LWL) academic departments (i.e. Business Administration, Computing and Information Management, and Engineering Management and Technology Departments) to be accommodated at the new campus, would provide "one-stop" training services for design-related industries ranging from product design, technology, manufacturing, sales and marketing to after-sales services. This would strengthen the capacity of the industries concerned and enhance the content and value of their products and services.

Note 8:   *In January 2003, the then Education Department was merged with the then Education and Manpower Bureau. In July 2007, the Bureau was renamed the EDB upon the reorganisation of the Government Secretariat.*

Photograph 1

HKDI and IVE(LWL) at TKL Campus

| HKDI | | IVE(LWL) |
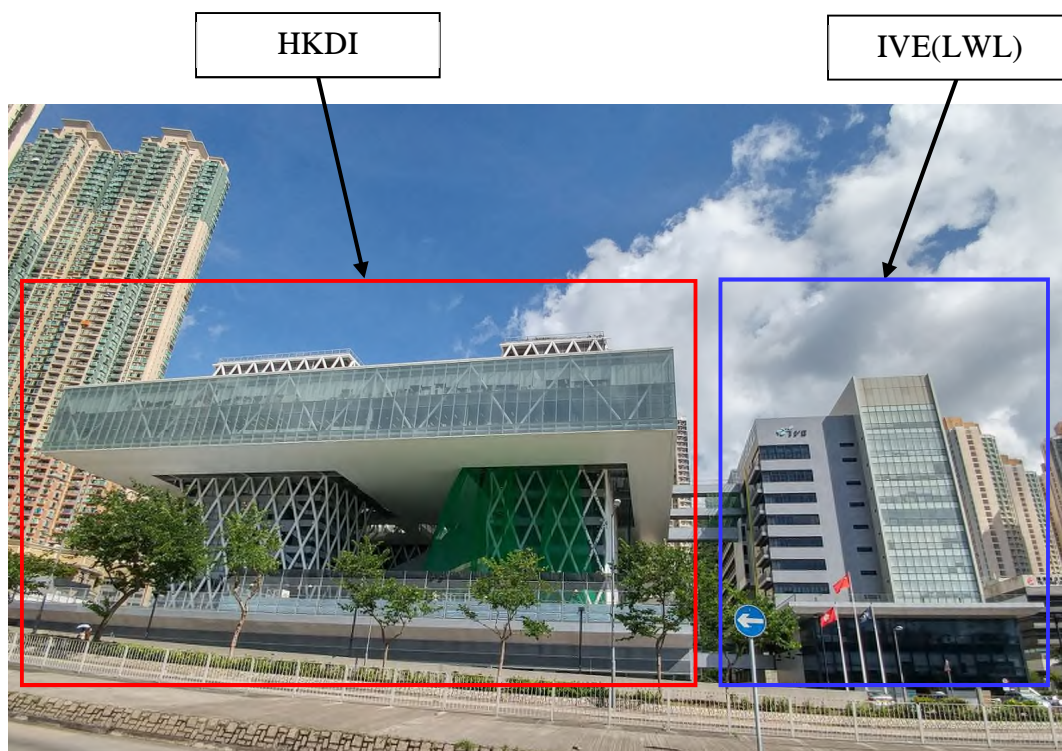
Source: Photograph taken by Audit Commission on 15 August 2017

1.13   The new campus was put into use in 2010/11. The actual construction cost incurred for the TKL Campus was $1,287.3 million (Note 9). The TKL Campus has a total net operating floor area of about 43,000 square metres (m^2). According to the FC paper of June 2007, the TKL Campus was designed as an open campus. Landscaped areas on the podium would be accessible to the general public. The student sports and amenity facilities (i.e. swimming pool, basketball courts, tennis court and gymnasium) at the new campus would also be open to the public during non-school hours.

Note 9:   *The difference of $281 million between the actual construction cost of $1,287.3 million and the amount of $1,006.3 million approved by the FC was funded by the surpluses from the VTC's self-financing activities, the VTC's Council Reserve, Government annual block grant and capital subventions for minor works, and donations (see para. 3.3).*

Audit review

1.14 In March 2017, the Audit Commission (Audit) commenced a review of the HKDI (Note 10). The audit has focused on the following areas:

    (a)   management of programmes (PART 2);

    (b)   campus development and management (PART 3); and

    (c)   administrative issues (PART 4).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

General response from the VTC

1.15 The Executive Director, VTC agrees with all the audit recommendations. She has said that continuous improvement is always the goal of the VTC in enhancing its performance.

Acknowledgement

1.16 Audit would like to acknowledge with gratitude the full cooperation of the staff of the EDB and the HKDI during the course of the audit review.

Note 10: *While IVE(LWL) is also accommodated in the TKL Campus, the audit review focused on the HKDI and did not cover the operations of IVE(LWL), which is one of the nine IVE campuses.*

PART 2: MANAGEMENT OF PROGRAMMES

2.1   This PART examines the management of programmes, focusing on the following areas:

    (a)   enrolment of new students (paras. 2.2 to 2.12);

    (b)   programme planning (paras. 2.13 to 2.21);

    (c)   evaluation of programme performance (paras. 2.22 to 2.41);

    (d)   performance reporting (paras. 2.42 to 2.45); and

    (e)   industrial attachment (paras. 2.46 to 2.52).

Enrolment of new students

2.2   In September each year, the HKDI reviews its programme plan and determines the number of planned Year 1 new student enrolment for each programme to be offered in the next academic year. The revised programme plan is submitted to the VETAB (see para. 1.11(a)) for approval in December each year. In 2016/17, the HKDI had a total student enrolment of 5,476, including Year 1 new students of 2,729.

Many programmes were over-enrolled

2.3   Audit noted that there had been over-enrolment of Year 1 new students in many programmes in the past years. In 2013, the CDM Programme Board (see para. 1.11(d)) of the HKDI expressed concern on the situation of student over-enrolment of its programmes and suggested that over-enrolment should be avoided in order to ensure the teaching quality and to prevent oversupply of graduates in the market and in the industry. At various meetings of the Board held in 2016, the possible impact of over-enrolment of students was discussed. The Board members pointed out that:

(a)   equipment would be insufficient for the over-enrolment;

(b)   some external examiners (Note 11) had reflected that they had difficulty in handling the student assessments with large number of students; and

(c)   over-enrolment situation would affect the resources and manpower.

2.4   Table 2 shows the over-enrolment of Year 1 new students for the period 2014/15 to 2016/17. In 2016/17, 13 of the 21 programmes were over-enrolled.

Table 2

**Over-enrolment of Year 1 new students
(2014/15 to 2016/17)**

Year	No. of programmes offered	No. of programmes with over-enrolment	All programmes			Over-enrolled programmes		
			Planned enrolment	Actual enrolment	Over-enrolment	Planned enrolment	Actual enrolment	Over-enrolment
2014/15	13	12	2,190	2,795	605 (27.6%)	2,040	2,648	608 (29.8%)
2015/16	17	13	2,220	2,804	584 (26.3%)	1,710	2,382	672 (39.3%)
2016/17	21	13	2,265	2,729	464 (20.5%)	1,530	2,143	613 (40.1%)

Source: Audit analysis of HKDI records

Remarks: Number of actual enrolment in this table was the enrolment figure as at 15 October of the year.

Note 11:   *An external examiner is appointed for each programme to oversee the overall academic standards/performance of learners in the programme. The duties of an external examiner include vetting the examination papers and marking schemes, and checking the marking of a representative sample of examination scripts, student projects and other assessment works.*

Management of programmes

2.5   Audit noted that for some programmes, the over-enrolment situation had persisted for many years. For instance, for 9 of the 12 over-enrolled programmes in 2014/15, the over-enrolment situation remained in 2015/16 and 2016/17. An analysis of the number of planned enrolment and actual enrolment of these 9 programmes is shown in Table 3.

Table 3

**Nine programmes which had been over-enrolled for three years
(2014/15 to 2016/17)**

Academic department	No. of programmes	2014/15		2015/16		2016/17	
		Planned enrolment	Actual enrolment	Planned enrolment	Actual enrolment	Planned enrolment	Actual enrolment
CDM	4	660	1,014 (154%)	570	976 (171%)	570	911 (160%)
PID	3	600	719 (120%)	450	629 (140%)	420	604 (144%)
FID	1	300	360 (120%)	300	309 (103%)	240	262 (109%)
DFS	1	60	69 (115%)	60	64 (107%)	60	84 (140%)
Overall	9	1,620	2,162 (133%)	1,380	1,978 (143%)	1,290	1,861 (144%)

Source: Audit analysis of HKDI records

2.6   Despite the over-enrolment situation, in 2015/16, the HKDI reduced the number of planned new student intake for 3 of the 9 over-enrolled programmes and in 2016/17, for 2 of the 9 programmes. Audit examination of these programmes revealed that there is no documentary evidence showing:

   (a)   the action taken by the HKDI to mitigate the possible adverse impact on the teaching quality of the programmes; and

   (b)   the justifications for reducing the number of planned Year 1 student enrolment.

2.7   In December 2016, the CDM Programme Board reported to the DEQAC that:

(a)   the over-enrolment created keen competition and stresses in the learning environment;

(b)   the students had expressed that there were inadequate printers in Learning Resources Centre; and

(c)   a review on planned intake should be conducted for 2017/18. In planning the number of student admission, the resource requirements in manpower and facilities had to be taken into account.

2.8   Audit considers that the HKDI needs to ensure that the number of students enrolled should not exceed the plan by a significant margin. Significant deviation from the plan should be fully justified and managed to mitigate the possible adverse impact on the quality of the programmes.

High percentage of staff with short-term contracts

2.9   Every year in April, the HKDI plans the teaching staff establishment for the next academic year based on planned enrolment. Teaching staff establishment is then revised based on actual enrolment in October. If there is over-enrolment, the HKDI will seek the additional teaching staff posts from the Headquarter's Human Resources Division (HRD). The total teaching staff establishment of the HKDI increased by 23, 20 and 16 (see Table 4) to 177, 186 and 185 in 2014/15, 2015/16 and 2016/17 respectively due to over-enrolment. Of the 59 additional teaching staff posts, 55 were filled by staff with a contract duration of one year or less (hereinafter referred to as short contract staff).

Table 4

**Number of additional teaching staff posts
(2014/15 to 2016/17)**

	Academic department				
	DFS	CDM	FID	PID	Total
2014/15					
Additional teaching staff posts	3	14	3	3	23
Posts filled by:					
(a) Short contract staff	3	12	3	2	20
(b) Staff with contract duration of more than one year or with open-ended contract	–	2	–	1	3
2015/16					
Additional teaching staff posts	3	12	–	5	20
Posts filled by:					
(a) Short contract staff	3	12	–	5	20
(b) Staff with contract duration of more than one year or with open-ended contract	–	–	–	–	–
2016/17					
Additional teaching staff posts	3	7	2	4	16
Posts filled by:					
(a) Short contract staff	3	6	2	4	15
(b) Staff with contract duration of more than one year or with open-ended contract	–	1	–	–	1

Source: Audit analysis of HKDI records

2.10   It was stipulated in the instruction issued by the Headquarter's HRD that the posts of short contract staff should not exceed 15% of the total number of teaching posts in accordance with the programme plan approved by the VETAB in December every year. Audit analysed the percentage of these short contract staff to the total number of teaching staff and found that due to over-enrolment of students, the overall percentages were 25%, 26% and 25% for 2014/15, 2015/16 and 2016/17 respectively (see Table 5). In 2016/17, for three academic departments (i.e. DFS, CDM and PID), the percentages of short contract staff were 41%, 30% and 17% respectively. Employing too many short contract staff might affect staff stability and morale, and thereby the teaching quality. The HKDI needs to take measures to plan the teaching staff requirement more accurately and to address the high percentage of short contract staff.

Table 5

**Percentages of short contract staff to total number of teaching staff
(2014/15 to 2016/17)**

	Academic department				
	DFS	CDM	FID	PID	Overall
2014/15					
Number of teaching staff (a)	27	70	40	40	177
Number of short contract staff (b)	11	21	7	6	45
Percentage of short contract staff (c)＝(b)÷(a)×100％	41％	30％	18％	15％	25％
2015/16					
Number of teaching staff (a)	35	74	36	41	186
Number of short contract staff (b)	15	23	3	7	48
Percentage of short contract staff (c)＝(b)÷(a)×100％	43％	31％	8％	17％	26％
2016/17					
Number of teaching staff (a)	34	74	35	42	185
Number of short contract staff (b)	14	22	3	7	46
Percentage of short contract staff (c)＝(b)÷(a)×100％	41％	30％	9％	17％	25％

Source: Audit analysis of HKDI records

Audit recommendations

2.11   **Audit has *recommended* that the Executive Director, VTC should:**

(a)   **ensure as far as possible that the number of students enrolled should not exceed the plan by a significant margin and any significant deviation from the plan should be fully justified;**

(b)   **take measures to mitigate the possible adverse impact of over-enrolment on the programmes;**

(c) **take into account the actual number of enrolment in previous years in planning the number of students to be enrolled; and**

(d) **take measures to plan the teaching staff requirement more accurately and to address the high percentage of short contract staff.**

Response from the VTC

2.12 The Executive Director, VTC agrees with the audit recommendations. She has said that:

(a) the VTC has always been taking measures to meet planned places though the intake is subject to many external factors such as the admission results of the Joint University Programmes Admission System and other incentive schemes offered;

(b) additional teaching and supporting staff, equipment and facilities, and other necessary resources have been provided to cater for the additional places; and

(c) ratio of short contract staff will be closely monitored.

Programme planning

2.13 In the period 2012/13 to 2016/17, there were 14 new programmes. Before a new programme is introduced, the pertinent Programme Board conducts a feasibility study and prepares a feasibility study report. The feasibility study report is then submitted to the DEDAB and DEAC for comments and endorsement. After endorsement by the DEDAB and DEAC, a programme proposal will be prepared outlining the details of the programme, including its structure, contents, number of student intake, and staff resources planning. The proposal will be submitted to the DEAC for endorsement and to the VETAB for approval. The procedures for development of a new programme are shown at Appendix E. Audit reviewed the

programme proposals for five new programmes (Note 12) and found that some planning information should be added.

Need to provide more analysis in programme proposals

2.14   *Planned numbers of student enrolment*. Audit noted that the programme proposals had stated the needs for the proposed new programmes and the planned enrolment of student intakes for the proposed programmes. However, no information was included in the proposals on how the planned numbers were derived. It would be helpful for reviewers of the proposals to have on the programme proposals the rationale behind the planned numbers, for instance, whether they were derived from the estimated demand and/or the capacity of the HKDI.

2.15   *Impact on teaching staff resources.* In all the five programme proposals reviewed by Audit, it was stated that the departments concerned were experienced in the area and that there was no strong impact on staffing for offering the new programmes. However, no further details were included in the programme proposals on the impact on teaching staff resources. For instance, it was not stated in the proposals how the additional staff hours for the new programme were to be met.

2.16   Audit considers that in proposing a new programme, it is important that more analysis on the planned number of student intake and impact on staffing are given.

Note 12:   *Of the five new programmes examined by Audit, two programmes were over-enrolled for the period 2013/14 to 2016/17 (the percentage of over-enrolment ranged from 2% to 137%, averaging 30%). Additional short contract staff were employed for the two over-enrolled programmes. One programme was under-enrolled for 2015/16 and 2016/17 (the percentage of under-enrolment was 14% and 31% for the two years respectively) and two programmes were under-enrolled in 2016/17 (the percentage of under-enrolment was 5% and 30% for the two programmes).*

Need to conduct manpower survey on design industry

2.17   Training Boards of the VTC conduct regular manpower surveys and publish manpower reports for various industries.   Manpower surveys conducted by four Training Boards are relevant to the HKDI.   They are Fashion and Textile Training Board, Jewellery, Watch and Clock Training Board, Media and Communications Training Board, and Print Media and Publishing Training Board.   However, manpower needs of some programmes offered by the HKDI are not covered by the manpower surveys of the Training Boards, such as:

(a)   HD in Architectural Design;

(b)   HD in Landscape Architecture;

(c)   HD in Product, Interior and Exhibition Design;

(d)   HD in Furniture and Lifestyle Product Design; and

(e)   HD in Stage and Set Design.

For these programmes, the Programme Boards have to obtain information on the industry manpower demand from a number of channels, including the manpower surveys conducted by the external trade or design bodies, the government statistics and the advisory boards such as the DEDAB and the DIAB served by industry members.   For instance, the annual statistics (such as the number of establishments, persons engaged and vacancies analysed by industry sub-class) from the Census and Statistics Department provide the basic information on manpower demand related to various design programmes.

2.18   In the DEDAB meeting held in November 2011, members discussed whether there was any survey on the manpower demand and supply of the design industry. They considered that a formal manpower survey on design industry would:

(a)   provide better understanding on the manpower requirement in design sector and the findings would be useful to the development of HKDI's programmes; and

(b)   be useful to both education and industry sectors.

2.19   Up to July 2017, no manpower survey on the design industry had been conducted. The HKDI needs to consider conducting a manpower survey on the design industry periodically and take into account the results of the survey in its programme planning and review.

Audit recommendations

2.20   **Audit has *recommended* that the Executive Director, VTC should:**

  (a)   **include in the programme proposals more details on the planned number of student intake and impact on teaching staff, for instance, how the number of student intake is derived and how the additional teaching staff resources are to be met; and**

  (b)   **consider conducting a manpower survey on the design industry periodically and take into account the results of the survey in its programme planning and review.**

Response from the VTC

2.21   The Executive Director, VTC agrees with the audit recommendations. She has said that:

  (a)   the HKDI will work with the VTC's Quality Assurance and Accreditation Office in reviewing the programme proposals; and

  (b)   the VTC will consider the need for conducting the manpower survey recommended.

Evaluation of programme performance

2.22   There is a Quality Assurance System to monitor the quality of the programmes of the HKDI. Under the system, the HKDI submits Programme Quality Analysis Report annually to the Headquarters. The performance of the HKDI's programmes is measured against seven indicators:

Management of programmes

(a) ***Enrolment rate.*** This is the actual number of students enrolled as at 15 October expressed as a percentage of planned places;

(b) ***Retention rate.*** This is the weighted average of the retention rates of the individual modules of the programme. The retention rate of a module is calculated by dividing the number of students assessed at the end of module by the number of students enrolled at the start of module;

(c) ***Pass rate.*** This is the weighted average of the pass rates of the individual modules of the programme. The pass rate of a module is calculated by dividing the number of students obtaining a pass in the module by the number of students assessed at the end of the module;

(d) ***Employment rate.*** This is calculated by dividing the number of graduates who are employed by the sum of the number of graduates who are employed and the number of graduates who are seeking employment;

(e) ***Further study rate.*** This is calculated by dividing the number of graduates in full-time study by the total number of graduates;

(f) ***Student satisfaction.*** This is an assessment of the students' satisfaction with the programme they study. The score for student satisfaction is obtained from analysing the results of student feedback survey; and

(g) ***Employer satisfaction.*** This is an assessment of the employers' satisfaction with the graduates' performance. The score for employer satisfaction is obtained from analysing the results of employer satisfaction survey.

Need to improve monitoring of completion rate of programmes

2.23   Under the Memorandum of Administrative Arrangement (MAA) signed between the VTC and the EDB, the VTC is required to set performance indicators and targets. One of the indicators specified in the MAA is "target completion rate of its trainees". It was stipulated in the MAA that the targets and actual results of completion rates should be reported to the EDB annually. Audit examination of the annual submissions made by the VTC to the EDB revealed that the VTC reported the retention rates of modules of its HD programmes (see para. 2.22(b)) but not the completion rate of its HD programmes.

2.24   Audit noted that from 2012/13 to 2014/15, the module retention rates were considerably higher than the programme completion rates. A programme completion rate measures the graduation rate of a cohort of students for the two-year HD programmes. A programme consists of many modules. A student completes a programme after he had completed all the required modules. Some students may have completed all the modules they had started but not completed the required modules for the programme.   Therefore, the module retention rate is higher than the programme completion rate.   Table 6 shows the module retention rates and programme completion rates for the period 2012/13 to 2014/15.

Table 6

Module retention rate and programme completion rate
(2012/13 to 2014/15)

Year	Module retention rate (Note 1) (a)	Programme completion rate (Note 2) (b)	Difference (c) = (a) − (b)
2012/13	98%	86%	12%
2013/14	98%	84%	14%
2014/15	97%	80%	17%

Source: Audit analysis of HKDI records

Note 1:   The module retention rate is the weighted average of the retention rates of all individual modules offered in the academic year.

Note 2:   The programme completion rate is the percentage of students of a particular intake year who have fulfilled all the graduation requirements of a programme.

Remarks: The programme completion rates of 2013/14 and 2014/15 were not the final figures as students were allowed to complete the programme within the maximum period of five academic years. Therefore, the completion rates for 2013/14 and 2014/15 may increase in the next few years.

Management of programmes

2.25   To measure the programme performance, the HKDI needs to consider monitoring the completion rates of programmes (i.e. percentage of students who complete the programmes) in addition to the module retention rates.

Programmes with low completion rates

2.26   The overall programme completion rates for 2012/13, 2013/14 and 2014/15 were 86%, 84% and 80% respectively (see Table 6 and Appendix F). Audit analysis of the programme completion rates for the 2012/13 to 2014/15 intakes revealed that:

   (a)   the programme completion rates of the HD in Architecture Design were particularly low. For each of the three years of 2012/13 to 2014/15, its completion rate was significantly lower than the overall rate. The differences were 15%, 26% and 29% respectively. They had dropped significantly from 71% of the students enrolled for 2012/13 to 51% of the students enrolled for 2014/15 (see Table 7); and

   (b)   the completion rate for the HD in Landscape Architecture dropped significantly from 88% of the students enrolled for 2012/13 to 68% of the students enrolled for 2014/15 (see Table 7). The completion rates of the students enrolled for 2012/13 and 2013/14 were higher than the overall completion rate, but of the students enrolled for 2014/15, the rate was lower than the overall rate by 12%.

Table 7

**Two programmes with low completion rate
(2012/13 to 2014/15 intake)**

HD programme	2012/13	2013/14	2014/15
Architecture Design			
− Students enrolled (a)	48	66	77
− Students awarded with HD (b)	34	38	39
− Completion rate (c)=(b)÷(a)×100%	71%	58%	51%
Landscape Architecture			
− Student enrolled (a)	26	71	62
− Students awarded with HD (b)	23	64	42
− Completion rate (c)=(b)÷(a)×100%	88%	90%	68%
All programmes	86%	84%	80%

Source: Audit analysis of HKDI records

2.27   Audit considers that the HKDI needs to ascertain the reasons for lower completion rate of some programmes (see para. 2.26(a) and (b)) and identify areas for improvement.

Target employment rate not met

2.28   The VTC sets a target employment rate (see para. 2.22(d)) of 90% for its HD programmes. Audit noted that the overall employment rate of the HKDI's HD programmes had been lower than the target rate of 90% since 2012 (see Table 8).

Table 8

Employment rate of graduates
(2011 to 2016)

Year of graduation	Employment rate
2011	90.8%
2012	87.7%
2013	87.8%
2014	84.1%
2015	83.9%
2016	86.4%

Source: HKDI records

2.29   The overall employment rates of HD programme graduates for 2014, 2015 and 2016 were 84%, 84% and 86% respectively (see Appendix G). Audit analysed the employment rate of individual programmes for graduates of 2014 to 2016 and noted that:

(a)   for graduates of 2014, 9 (60%) of the 15 programmes had employment rate below target, ranging from 61% to 84%. For graduates of 2015, 12 (80%) of the 15 programmes had employment rate below target, ranging from 67% to 89%. For graduates of 2016, 8 (53%) of 15 programmes had employment rate below target, ranging from 75% to 88% (see Table 9); and

Table 9

**Analysis of employment rate for graduates of HD programmes
(2014 to 2016)**

	2014 Graduates	2015 Graduates	2016 Graduates
Number of programmes with employment rate below the target rate of 90% (a)	9	12	8
Number of programmes offered (b)	15	15	15
Percentage of programmes with employment rate below the target rate of 90% (c)=(a)÷(b)×100%	60%	80%	53%
Employment rate of programmes below the target rate of 90%	61% to 84%	67% to 89%	75% to 88%

Source: Audit analysis of HKDI records

(b)   in particular, the employment rates of four programmes had not achieved the 90% target in every year of 2014 to 2016.

2.30   Audit considers that the HKDI needs to step up efforts to improve the employment rate of HKDI graduates for the programmes with lower employment rates.

Need to improve the response rate of Graduate Employment Survey

2.31   The Headquarter's Statistics Section conducts Graduate Employment Survey of full-time programmes offered by the IVE and the HKDI in January each year (i.e. 6 months after graduation) by sending questionnaires to the graduates to study their employment situation.   The survey results provide information on the employment rate of graduates, which is one of the performance indicators under the Quality Assurance System (see para. 2.22(d)).

2.32   The IVE and the HKDI are the two member institutions of the VTC that offer the great majority of HD programmes and thus the VTC often analyses statistics relating to the IVE and the HKDI together.   Audit analysed the response rate of Graduate Employment Survey for full-time graduates of the HKDI of the years 2014 to 2016 and noted that the rate was lower than the overall response rate for graduates of all full-time programmes of the IVE/HKDI (see Figure 1).

Figure 1

**Response rate of Graduate Employment Survey
(2014 to 2016)**
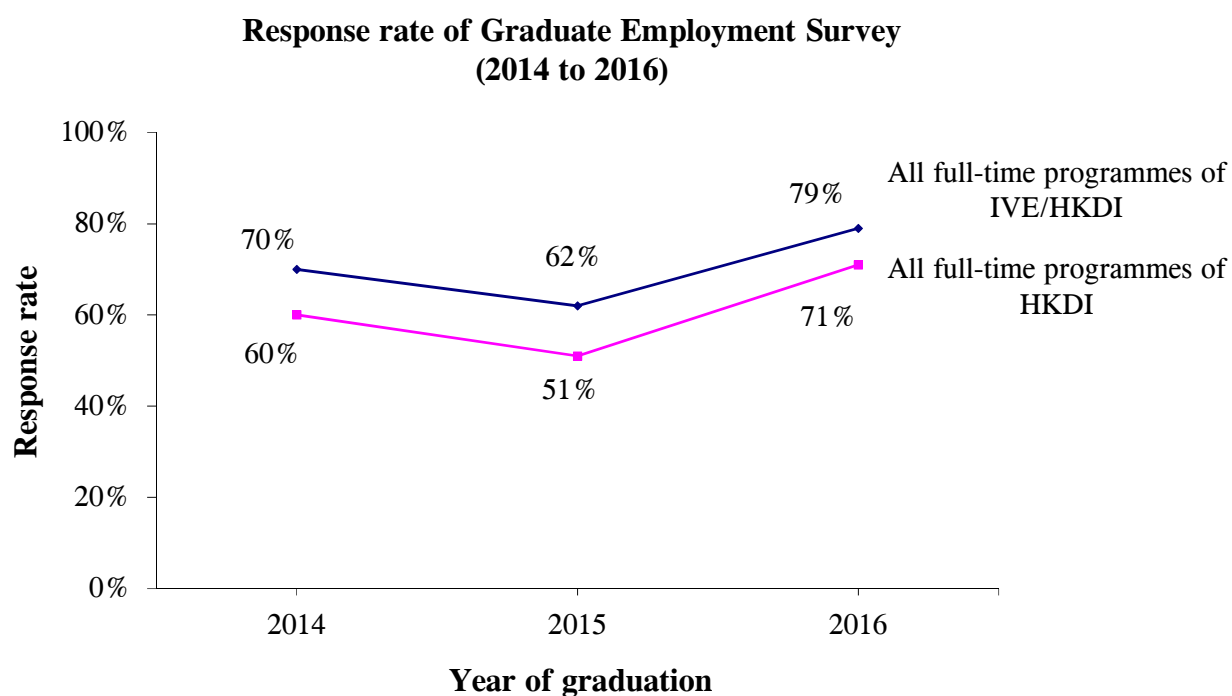
Source: Audit analysis of HKDI records

2.33   Figure 1 indicates that there was an overall increase in response rate for graduates of 2016 as a result of:

(a)   allowing graduates to complete and submit questionnaires on-line through the VTC's webpage; and

(b)   providing incentive by offering a coffee e-coupon for the first 500 graduates who completed the survey.

2.34   Despite the increase in response rate of employment survey on graduates of 2016, the response rate for graduates of HKDI programmes (i.e. 71%) was still on the low side as compared with the graduates of sub-degree programmes of other higher education institutions (see Table 10).

Table 10

**Response rate of employment survey on graduates of
sub-degree programmes of higher education institutions
(2016)**

Institution	Response rate
A	98%
B	97%
C	93%
D	93%
E	88%
F	85%
G	84%
H	84%
IVE/HKDI	79%
HKDI	71%

*Source: Information Portal for Accredited Post-secondary
              Programmes website and Audit analysis of HKDI
              records*

2.35   Audit considers that the HKDI needs to take measures to improve the response rate of Graduate Employment Survey of HKDI graduates to enhance the usefulness and representativeness of the information collected from the survey.

Need to cover more graduated students' employers in employer satisfaction surveys

2.36   The VTC engaged a consultant to conduct employer satisfaction survey in August every year (i.e. one year after graduation) by sending questionnaires to graduated students' employers to collect information on the employers' satisfaction with the training programmes of graduates and the graduates they employed. For those graduates who fulfil the following criteria, their employers will be invited to participate in the survey:

(a)   graduates who engage in full-time job relevant to their study;

(b)   graduates who are employed by the same company for at least six months prior to the survey period; and

(c)   graduates who give consent for the VTC to contact their employers for the survey.

2.37   The results of the employer satisfaction survey provide an assessment on the level of employers' satisfaction (which is rated on a scale of 1 (very poor) to 10 (excellent)) on the students they employed. According to the results of the survey on the 2014 and 2015 graduates, the overall satisfaction level of employers of HKDI graduates on a scale of 1 to 10 was 7.7 and 7.3 respectively.

2.38   Audit noted from the surveys conducted for graduates of 2014 and 2015 that:

(a)   the surveys only covered a small number of employers of HKDI graduates:

(i)   the number of questionnaires sent out was 46 and 45 for employed graduates of 2014 and 2015 respectively, representing 7% of 668 employed graduates of 2014 and 8% of 544 employed graduates of 2015 (Note 13); and

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Note 13:   *The number of employed graduates refers to those who replied that they were in full-time employment in the Graduate Employment Survey. The actual number of employed graduates might be larger.*

(ii)   43 and 35 questionnaires were returned for the survey conducted for graduates of 2014 and 2015 respectively;

(b)   some programmes were not covered in the surveys. No questionnaires had been sent to the employers of 78 employed graduates of 2014 of five programmes and of 17 employed graduates of 2015 of three programmes. As a result, the employers' views on graduates of these programmes could not be ascertained; and

(c)   for those programmes covered in the surveys, only a small number of employers were surveyed for each programme, ranging from 1 to 6.

2.39   As employers' satisfaction is one of the performance indicators in the Quality Assessment System (see para. 2.22(g)), the representativeness of the data collected from the survey is important. Audit considers that the HKDI needs to review the criteria for selecting employers for the employer satisfaction survey and take measures to encourage graduates to give consent for the VTC to contact their employers, with a view to covering more graduates' employers in the survey.

Audit recommendations

2.40   **Audit has *recommended* that the Executive Director, VTC should:**

(a)   **consider monitoring the programme completion rates in addition to the module retention rates;**

(b)   **ascertain the reasons for lower completion rates of some programmes and identify areas for improvement;**

(c)   **take measures to improve the employment rate of HKDI graduates with a view to meeting the target employment rate of 90%;**

(d)   **take measures to improve the response rate of Graduate Employment Survey of HKDI graduates to enhance the usefulness and representativeness of the information collected from the survey; and**

(e) **review the criteria for selecting employers for the employer satisfaction survey and take measures to encourage graduates to give consent for the VTC to contact their employers, with a view to covering more graduates' employers in the survey.**

Response from the VTC

2.41　　The Executive Director, VTC agrees with the audit recommendations.　She has said that:

(a)　　the VTC will consider monitoring the programme completion rate;

(b)　　the VTC will ascertain the reasons for low completion rates of some programmes, and identify areas for improvement;

(c)　　the VTC will take measures to improve the employment rate of HKDI graduates; and

(d)　　the VTC's Statistics Section has explored approaches to:

(i)　　improve the response rate of the Graduate Employment Survey;

(ii)　　review the criteria for selecting employers for the employer satisfaction survey; and

(iii)　　encourage graduates to give consent for the VTC to contact their employers.

Performance reporting

Need to improve the extent of performance reporting

2.42   *Need to consider disclosing separately performance information of HKDI.* The VTC discloses on its website various information/statistics (e.g. number of enrolment, number of graduates and employment rate) for the IVE, HKDI, School of Business and Information Systems, and Youth College as a whole. The related information of the HKDI was not reported separately. To measure and report the HKDI's performance, and its progress in achieving its mission, the VTC needs to consider disclosing separately the HKDI's key performance information and statistics, such as the:

(a)   enrolment rate;

(b)   completion rate;

(c)   employment rate; and

(d)   employers' satisfaction on its graduates.

2.43   *Need to enhance information on employability and articulation.* The VTC discloses on its website the employment rate of HD programme graduates and the number of HD programmes graduates successfully articulated to full-time degree programmes. For instance, for the 2016 graduates, it was disclosed on the website that the employment rate was 90% and more than 3,000 graduates successfully articulated to full-time degree programmes (see Table 11). However, there was no information on the number of graduates who were employed and those who were seeking employment, and the number of graduates out of whom 3,000 articulated successfully to full-time degree programmes. It would be much more useful to the users of the website if the information about graduates who successfully obtained employment and graduates who successfully articulated to full-time degree programmes is given in terms of both:

(a)   the number of graduates; and

(b)   the percentage of graduates.

Table 11

**Information on employment and articulation of graduates of
HD programmes disclosed on VTC website
(2016)**

	Successfully secured employment	**Successfully secured articulation**
Percentage of graduates	"IVE/HKDI HD graduates enjoy 90% employment rate" (Note)	Not disclosed
Number of graduates	Not disclosed	"Over 3,000 HD graduates were successfully admitted to full-time degree programmes"

Source: *VTC records*

Note: *The VTC calculated the employment rate by dividing the number of graduates who were employed by the sum of the number of graduates who were employed and the number of graduates who were seeking employment.*

Remarks: *The VTC did not disclose graduate information of the HKDI and other member institutions separately.*

Audit recommendations

2.44   **Audit has *recommended* that the Executive Director, VTC should consider:**

(a)   **disclosing separately the key performance information and statistics of the HKDI and those of other member institutions, such as the enrolment rate, completion rate, employment rate and employers' satisfaction on its graduates; and**

(b)   **disclosing on its website information on HKDI graduates who successfully obtained employment and those who successfully articulated to full-time degree programmes in terms of:**

(i)   **the number of graduates; and**

(ii)   **the percentage of graduates.**

Response from the VTC

2.45   The Executive Director, VTC agrees with the audit recommendations. She has said that:

   (a)   when considering possibility of separate disclosure of the information, the VTC has to pay regard to the consistency in handling information packaging and messaging in respect of all HD programmes, given that both the HKDI and the IVEs are offering the same programme type; and

   (b)   the VTC will consider disclosing on its website the information on the number and the percentage of graduates.

Industrial attachment

2.46   To strengthen students' readiness for the workplace and to facilitate a smooth transition from study to work, industrial attachment (IA) has been included as a mandatory graduation requirement of all HD programmes starting from 2012/13 intake. There are four categories of IA:

   (a)   *Category A.* This refers to attachment in field or industry relevant to the programme of study;

   (b)   *Category B.* This refers to workplace experience through industry-based projects conducted at home, on campus or other operating units of the VTC;

   (c)   *Category C.* This refers to other structured experiential learning experience (e.g. attachment in a field or industry not directly related to the programme of study); and

   (d)   *Category D.* This refers to general workplace experience.

Category A is the most preferred category of IA while Category D is the least preferred category of IA. An IA module consists of a minimum of 90 hours of industrial placements or industry-based projects sponsored/initiated by industry partners.

Need to increase the proportion of Category A of IA

2.47   Category A is the most preferred category of IA (see para. 2.46). Statistics of IA arrangements in the period 2012/13 to 2015/16 revealed that while the number of Category A of IA for the HKDI students increased from 710 to 1,282, the proportion of this Category decreased from 70% (i.e. 710 out of 1,015) to 52% (i.e. 1,282 out of 2,477), compared to the corresponding figures for the average of all VTC HD programmes ranging from 82% to 86% in the same period (see Figure 2).

Figure 2

**Proportion of Category A of IA
(2012/13 to 2015/16)**
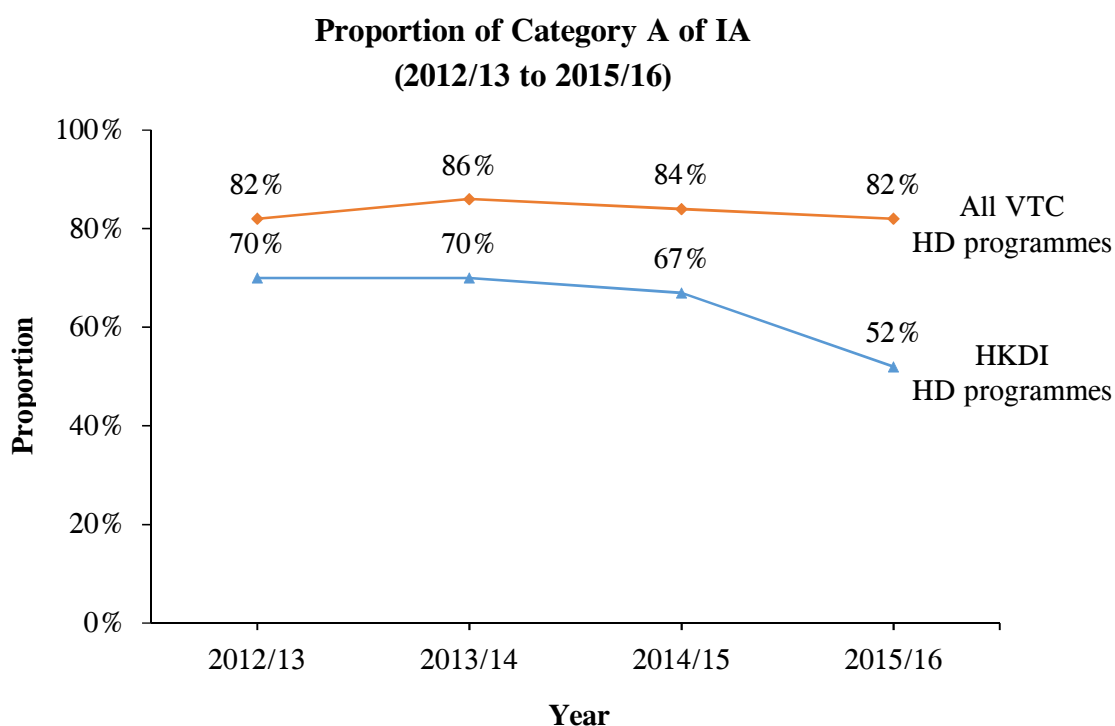
Source: Audit analysis of HKDI records

Need to improve the response rates of students' opinion survey on IA

2.48   The VTC conducts students' opinion surveys to evaluate the effectiveness of the IA programme. Findings and recommendations are provided to the academic disciplines to enhance implementation of the IA programme. Audit noted that the response rates of the students' opinion survey on IA for the HKDI HD programmes were on the low side and decreased from 15% (i.e. 154 responded out of 1,015) in 2012/13 to 6% (i.e. 151 responded out of 2,477) in 2015/16. The HKDI response

rates were much lower than the overall rates of all the VTC HD programmes (ranged from 40% to 52%) in the same period (see Figure 3). Audit considers that the low response rates of the students' opinion survey may render the survey results less representative. The HKDI needs to ascertain the reasons for the low response rates and take improvement measures.

Figure 3

**Response rates of students' opinion survey on IA
(2012/13 to 2015/16)**
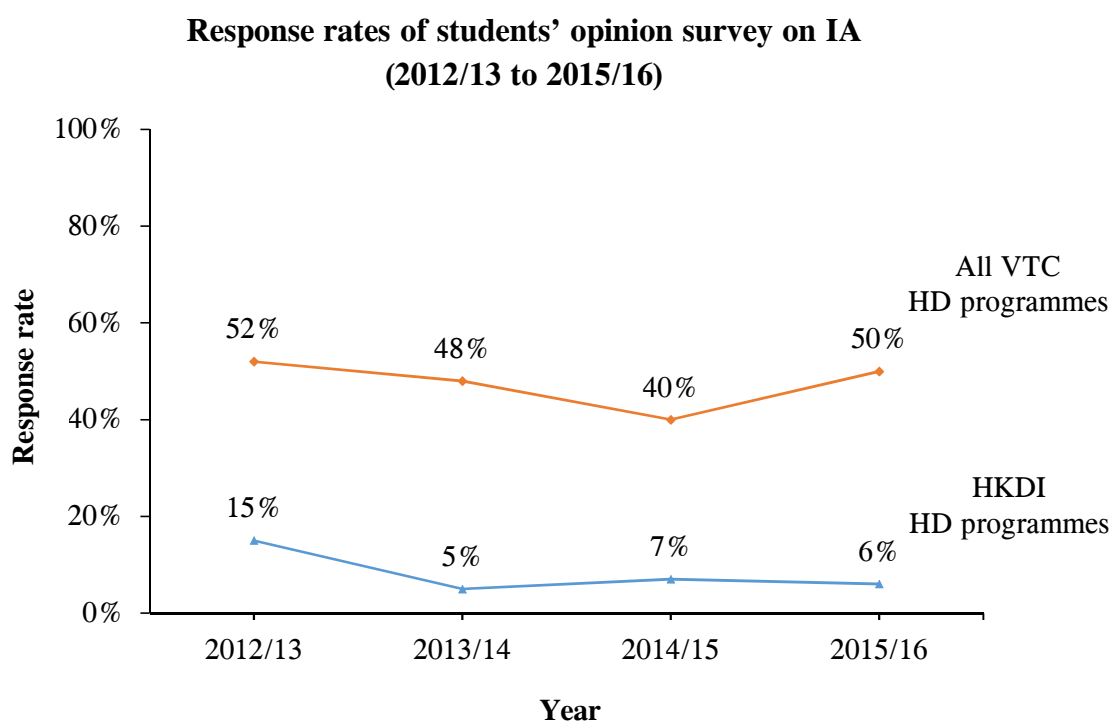
Source: Audit analysis of HKDI records

Need to review minimum duration of IA

2.49   According to a DEDAB paper issued in June 2014, some industry partners commented that:

(a)   short IA durations were ineffective for student learning and even disruptive for the organisations providing IA; and

(b)   longer attachment duration (two months or more) would be needed for an IA arrangement to achieve mutual benefits for both students and employers.

2.50   Audit noted that the minimum duration of IA for some HD programmes in design discipline offered by two other tertiary institutions were 120 hours and 1 month respectively, much longer than the minimum of 90 hours for the HKDI's programmes. Furthermore, the minimum duration of IA for the HKDI had not been reviewed since 2012/13. Audit considers that the HKDI needs to conduct a review on the minimum duration of IA and consider if there is merit in extending the minimum duration.

Audit recommendations

2.51   **Audit has *recommended* that the Executive Director, VTC should:**

(a)   **take measures to increase the proportion of Category A of IA for the HKDI's HD programmes;**

(b)   **ascertain the reasons for the low response rates of the students' opinion survey on IA for the HKDI and take improvement measures; and**

(c)   **conduct a review on the minimum duration of IA for the HKDI's HD programmes and consider if there is merit in extending the minimum duration.**

Response from the VTC

2.52   The Executive Director, VTC agrees with the audit recommendations. She has said that the VTC will consider the recommendations and review the prevailing policy and practice for improvement where appropriate.

PART 3: CAMPUS DEVELOPMENT AND MANAGEMENT

3.1　　　This PART examines the campus development and management, focusing on the following areas:

(a)　　design competition of HKDI (paras. 3.4 to 3.11);

(b)　　project development of HKDI (paras. 3.12 to 3.34); and

(c)　　management of campus (paras. 3.35 to 3.54).

Background

3.2　　　After discussions between the VTC and the EDB, it was decided in February 2006 to develop the HKDI and IVE(LWL) together at the TKL Campus to achieve synergy (see paras. 1.3 and 1.12). In June 2007, the FC approved the funding for the project with a project estimate of $992.8 million in September 2006 prices, which was equivalent to $1,006.3 million in money-of-the-day prices (Note 14). The development of the TKL Campus was completed in April 2010 and put into use in 2010/11.

3.3　　　The actual construction cost of the TKL Campus was $1,287.3 million. The difference of $281 million between the actual construction cost of $1,287.3 million and the amount of $1,006.3 million approved by the FC was funded by the surpluses from the VTC's self-financing activities ($170.8 million), the VTC's Council Reserve ($76 million), Government annual block grant and capital subventions for minor works ($33.7 million) and donations ($0.5 million) (see Table 12).

Note 14:　*Money-of-the-day prices show the estimated cost of a project after allowing for forecasted inflationary increases in construction prices during the period of construction.*

Table 12

Actual construction cost and funding source of TKL Campus

	Amount ($ million)
Actual construction cost	
Superstructure works (including building services)	1,171.9
Foundation works	46.4
Architectural consultancy	43.9
Information technology infrastructure and surveillance camera system	10.6
Quantity surveying consultancy	3.3
Others (e.g. signage, loose furniture and equipment)	11.2
Total	1,287.3
Funding source	
Funding approved by FC	1,006.3
Surpluses from VTC's self-financing activities	170.8
VTC's Council Reserve	76.0
Government annual block grant and capital subventions for minor works	33.7
Donations	0.5
Total	1,287.3

Source: VTC records

Design competition of HKDI

3.4   In April 2006, the VTC organised a design competition for the HKDI. A Jury Panel, which was assisted by a Technical Committee, was appointed by the VTC to assess the competition entries (Note 15). A Competition Document stipulated the rules, requirements and conditions of the competition. It was stated in the Competition Document that:

(a)   contestants were required to keep the project cost strictly within the budget of $378 million;

(b)   any contestant who did not abide by the rules, requirements or conditions as set out in the Competition Document might result in disqualification from the competition;

(c)   the decisions of the Jury Panel should be final and could not be appealed against; and

(d)   the VTC's decision regarding all aspects of the competition was final and binding on all contestants.

Table 13 shows the relationship between the construction budget of $378 million for the competition and the cost estimate of $1,006.3 million approved by the FC in June 2007.

Note 15:   *The Jury Panel had seven jurors, comprising a member of the DIAB, a member of the VTC Council, a member of the VTC Estates Committee, two international renowned architects and two academics.*

Table 13

**Relationship between the construction budget for the design competition
and the cost estimate approved by the FC in June 2007**

	Amount ($ million)
(a) 2005 Government Capital Works Resource Allocation Exercise for construction of new HKDI campus – construction budget for design competition: $378 million – other costs of the project: $107.4 million	485.4
(b) 2006 Government Capital Works Resource Allocation Exercise for reprovisioning of IVE(LWL)	388.2
(c) Adjustments (including cost of additional piling works, upgrade to University Grants Committee institution buildings standards, etc.)	119.2
(d) Cost estimate approved by the FC in September 2006 prices (a)+(b)+(c)	992.8
(e) Provision for price adjustment	13.5
(f) Cost estimate approved by the FC in money-of-the-day prices (d)+(e)	1,006.3 (Note)

Source: Audit analysis of VTC records

Note: The difference between the actual construction cost of $1,287.3 million and the amount of $1,006.3 million approved by the FC was mainly attributable to: (a) higher awarded tender prices of the superstructure contract and the building services contract than the corresponding cost estimates; and (b) variation orders on the works contracts. A reason for the higher awarded tender prices was that the modified Hybrid Scheme was adopted (see paras. 3.21(c), 3.21(f) and 3.22(f)) instead of the Reinforced Concrete Scheme, based on which the construction cost was calculated for the application for FC funding.

3.5   The cost estimate of the winning design submitted on 27 October 2006, in which the campus consisted of a podium with four towers supporting a sky platform, was $470.4 million.   The design included a number of cost saving options which, according to the contestant, could reduce the cost estimate by $93 million to $377.4 million (i.e. $0.6 million lower than the cost ceiling of $378 million).

Different views on project cost of winning design

3.6   On 10 November 2006, the Jury Panel made its final adjudication and recommended the winning design.   On 13 November 2006, the VTC Council Secretariat sought the endorsement of the VTC Estates Committee and approval of the VTC Standing Committee on the recommendation of the Jury Panel.   The terms of references of the VTC Standing Committee and the VTC Estates Committee were at Appendix H and Appendix I respectively.   The Committees were informed that, taking into account the cost saving options and the views of the Technical Committee for the competition (Note 16), the estimated construction cost of the design could be reduced by $65.4 million (see Table 14).   The Committees were also informed that the revised cost estimate was $405 million, which exceeded the allowed construction budget for the design competition of $378 million specified by the VTC by $27 million (7%).

Note 16:   *The main role of the Technical Committee was to pre-examine the entry designs according to the Competition Document and assess whether the entry designs fulfilled the mandatory requirements of the competition and local regulations were met.*

Table 14

**Comparison of cost saving options proposed in the winning design
and the assessment made by the Technical Committee**

Possible cost saving options	Amount of savings		
	Estimated in the submission of the winning design ($ million) (a)	Estimated by the Technical Committee ($ million) (b)	Difference ($ million) (c) = (b) − (a)
Use reinforced concrete truss instead of steel truss in platform and towers (i.e. using reinforced concrete structure instead of steel structure)	50	30	(20)
Separate funding for noise abatement measures	22	–	(22)
Relocate basement car parking to ground floor	15	15	–
Separate funding for swimming pool	5.3	5.3	–
Separate funding for basketball court	0.7	0.7	–
Close up part of the void at platform and realign the four towers	–	5	5
Extra low voltage installation funded under furniture and equipment budget	–	9.4	9.4
Total	93	65.4	(27.6)

Source: Audit analysis of VTC records

3.7   The differences between the estimated cost savings submitted by the winning design and those assessed by the Technical Committee were:

(a)   different views on the cost saving option of using reinforced concrete (RC) structure instead of steel structure;

(b)   the cost saving option for noise abatement measures for $22 million was not accepted by the Technical Committee; and

(c)   the Technical Committee recommended two additional cost saving options (i.e. $14.4 million in total).

3.8   On 20 November 2006, the Standing Committee and the Estates Committee held a joint meeting to ratify the Jury Panel's recommendation. Although the overall cost estimate after cost saving options as assessed by the Technical Committee had exceeded the original budget ceiling by $27 million (see para. 3.6), the Committees ratified the Jury Panel's recommendation. Members agreed that the possible shortfall be earmarked from the VTC's earnings from its self-financing programmes. The result of the competition was announced on 28 November 2006.

3.9   Audit considers that the cost saving options submitted by the contestant should have been thoroughly assessed by the Technical Committee before the Jury Panel made its final decision on the result of the competition. There was no documentary evidence showing that the Jury Panel was informed of the assessment made by the Technical Committee on the cost saving options included in the winning design on 10 November 2006, when the Panel made its final decision on the result of the competition.

Audit recommendation

3.10   Audit has *recommended* that the Executive Director, VTC should, for future design competitions, if the competition requires the entry designs to fulfil the mandatory budget requirements, thoroughly assess the cost estimates submitted by the contestants before the Jury Panel made its final decision on the result of the competition.

Response from the VTC

3.11   The Executive Director, VTC agrees with the audit recommendation. She has said that cost estimates and mandatory budget requirements would be thoroughly assessed in future design competitions.

Project development of HKDI

3.12   In November 2006, according to the conditions of the competition, the VTC awarded the architectural consultancy for the construction of the HKDI to the design architect of the winning design and its local collaborating consultant. In the same month, the architectural consultancy for the re-provisioning of IVE(LWL) was awarded through the standard two-envelope technical and fee tender system. The same local consultant was awarded the tender in the tender exercise. In December 2006, the VTC convened a Client Consultants Group (CCG) to take forward the project based on the winning design. The CCG consisted of:

(a)   members from the VTC including a Deputy Executive Director; and

(b)   project consultants.

3.13   At the CCG meeting held in February 2007, three structural schemes of the HKDI, which featured a sky platform and four towers, were discussed, namely:

(a)   *RC Scheme.* Under this scheme, RC would be used for floor framing, trusses and lattice;

(b)   *Steel Scheme.* Under this scheme, steel would be used for floor framing, trusses and lattice; and

(c)   *Hybrid Scheme.* Under this scheme, RC would be used for floor framing and lattice of the tower structure, and steel for floor framing and trusses of the platform.

3.14　　The pros and cons analysis of the three structural designs was discussed at the meeting held on 21 March 2007.　Some of the pros and cons of the three designs are listed in Table 15.

Table 15

**Comparison of the structural schemes
submitted to the CCG in March 2007**

	RC Scheme	**Steel Scheme**	**Hybrid Scheme**
Pros	(a) most conventional construction method (b) easy to maintain (c) no long procurement time for RC construction	(a) maximum space efficiency (b) lowest foundation cost (c) less formwork and falsework (d) fastest construction method for the winning design	(a) lower foundation cost (b) more open feel to spaces (c) less formwork and falsework for platform construction
Cons	(a) highest foundation cost (b) unfriendly circulation due to large truss member size of platform (c) maximal loss of usable space due to member size	(a) uncertainty in construction cost due to fluctuation of steel price (b) fire and corrosion protection required for steelwork (c) long procurement time for steelwork	(a) complicated detail between RC and steel (b) long procurement time for steelwork
Estimated cost ($ million)	1,080	1,160	1,136

Source:　VTC records

Remarks:　The pros and cons of the modified Hybrid Scheme (see para 3.15) were not discussed by the CCG.

CCG adopted the modified Hybrid Scheme

3.15   On 30 April 2007, the project consultant informed the CCG that the current design was based on a composite structure of RC and steel and the finalised design based on this design option would be ready shortly. The consultant explained that the design was a modified Hybrid Scheme, under which exposed vertical structural elements (i.e. lattice of towers and diagonal truss of the platform) would be steel, and all slabs, internal walls of towers and podium would be RC structures. The consultant advised the CCG that the design option was the most structural-effective option. In the Hybrid Scheme, RC was used for the construction of lattice of the tower structure, instead of steel as in the modified Hybrid Scheme. Audit noted that no documentary evidence was available showing that the pros and cons of the modified Hybrid Scheme had been discussed by the CCG. Furthermore, there was no documentary evidence showing how the modified Hybrid Scheme would affect the costs and timing of the project.

Application for funding from FC based on RC Scheme
instead of modified Hybrid Scheme adopted for construction

3.16   According to the VTC's Notes for Guidance on Capital Subventions, before funding application can be submitted to LegCo, the VTC needs to submit architectural design and costing to the Architectural Services Department (ArchSD) for approval. In the preparation of the funding application to the FC, the VTC submitted the project cost estimate of $992.8 million (see Table 13 in para. 3.4) based on the RC Scheme to the ArchSD for vetting on 8 and 14 March and 4 and 18 April 2007. In the CCG meeting on 30 April 2007, the modified Hybrid Scheme was adopted. However, no documentary evidence was available showing that the VTC had submitted any revised cost estimate to the ArchSD to take into account the fact that the modified Hybrid Scheme was adopted.

3.17   On 1 June 2007, the VTC Estates Committee was informed that *"the new campus designed by the design team is a composite reinforced concrete and steel structure"*. Furthermore, on 15 June 2007, the project consultant revised the project cost estimate from $992.8 million to $1,064.1 million based on the modified Hybrid Scheme. The revised estimate was $71.3 million (7%) higher than the cost estimate of $992.8 million submitted to the ArchSD in April 2007 mainly due to the higher cost of the modified Hybrid Scheme. There was no documentary evidence showing that the VTC had submitted the revised project cost estimate of $1,064.1 million to the ArchSD. In the event, the project cost estimate quoted in the funding application paper

(see para. 3.2) submitted to the FC on 22 June 2007 was $992.8 million indicating the adoption of the RC Scheme.

Need to seek agreement from the ArchSD according to VTC guidelines before issuing tender

3.18   Financial Circular No. 9/2004 "Guidelines on the Management and Control of Government Funding for Subvented Organisations" states that the Controlling Officers (Note 17) should, at various stages of the subvented building projects, seek technical advice of the ArchSD on the acceptability of the projects for subvention purposes. Areas on which the ArchSD may be consulted include project feasibility, design, scope, cost and selection of consultants and contractors.

3.19   The ArchSD is required to provide technical advice to ensure that government subvented and entrusted projects conform to government requirements by:

(a)   vetting budget, design, tender documents, tender recommendations and final accounts; and

(b)   identifying non-conformities in design, standards and tendering procedures.

3.20   The VTC's Notes for Guidance on Capital Subventions stipulate that the VTC should seek agreement from the ArchSD before issuing tenders for the projects.

3.21   Audit noted that the VTC had not sought agreement from the ArchSD according to the VTC's Notes for Guidance on Capital Subventions before issuing tenders for the project. Audit examination of the project records revealed that:

(a)   on 15 October 2007, the VTC submitted the draft tender document for the superstructure to the ArchSD for vetting. On 17 and 23 October 2007, the ArchSD informed the VTC that "*the submission was incomplete and inadequate for tendering*", and asked the project consultant to submit a complete design and tender document for the ArchSD's vetting. On

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Note 17:   *The Permanent Secretary for Education was the Controlling Officer for this project.*

26 October 2007, the VTC submitted the project consultant's letter to the ArchSD clarifying that the tender documents had been amended in accordance with the ArchSD's comments, and the consultant opined that the issued drawing was adequate for the tender to provide a reasonable tender price;

(b)   on 30 October 2007, the ArchSD informed the VTC that *"the completion of technical vetting depends on the completeness, adequacy and quality of submission.….We are informed by your consultants verbally today that the invitation of tender will commence tomorrow irrespective of whether we have completed the vetting or not. Please be reminded that the authority to approve the commencement of the tendering process rests with the VTC, and VTC alone will be responsible for any additional expenses associated with its approval of a tender which contains incomplete and inadequate information"*;

(c)   on 30 October 2007, the VTC invited tenders for the superstructure contract for the TKL Campus based on the modified Hybrid Scheme (Tender A), with an option of using the RC Scheme (Tender B). Tenderers were invited to quote prices on both options;

(d)   on 1 November 2007, the consultants assured the VTC in the letter that *"this tender is considered suitable for tender purpose. Nevertheless, comment from the ArchSD will be duly incorporated in the tender document and our project quantity surveyor is refining the tender document for issuing tender addendum in mid November 2007"*;

(e)   on 23 November 2007, the ArchSD reiterated to the VTC that the tender drawings were inadequate and incomplete for tendering purpose. On 28 November 2007, the consultants wrote to the VTC with a copy to the ArchSD, stating that the ArchSD's comments had been incorporated in the tender addenda;

(f)   on 12 December 2007, the tender was closed. The lowest price for Tender A was $1,155 million and the lowest price for Tender B was $1,032 million; and

(g)   on 19 December 2007, the ArchSD informed the VTC that for Tender B, *"there are insufficient structural details provided"*.

RC Scheme not followed

3.22   At the joint meeting of the VTC Standing Committee and VTC Estates Committee held on 20 November 2006, when the Committees ratified the recommendation of the Jury Panel for the design competition, the winning design was based on the RC Scheme. The two Committees agreed and the VTC Council approved to set aside $40 million from VTC's self-financed programmes to meet the possible shortfall in the budget based on the cost estimate of using RC Scheme. Moreover, the project cost estimate submitted by the VTC for vetting by the ArchSD in March 2007 and the project estimate of $1,006.3 million in money-of-the-day prices approved by the FC in June 2007 was based on the RC Scheme (see para. 3.17). Notwithstanding this, the HKDI was eventually built using the modified Hybrid Scheme. Audit examined the records and noted that although the RC Scheme was considered in November 2006 and March 2007, the Scheme had not been rigorously pursued since April 2007:

Modified Hybrid Scheme taken forward

(a)   on 30 April 2007, the project consultant informed the CCG that the current design was based on the modified Hybrid Scheme. The consultant further advised that this design option was the most structural-effective option and the finalised design would be ready shortly. On 15 June 2007, the consultant issued an updated cost estimate of $1,064.1 million based on the modified Hybrid Scheme, which was $71.3 million (7%) higher than the cost estimate of $992.8 million based on the RC Scheme submitted to the ArchSD on 26 April 2007;

(b)   on 30 October 2007, the VTC issued the tender for the superstructure contract based on the modified Hybrid Scheme (Tender A). An option of using the RC Scheme (Tender B) was included in the tender and tenderers were invited to quote prices on it as well. On 28 December 2007, the VTC informed the ArchSD that the VTC had commenced cost reduction exercise with the lowest tenderer of Tender A (modified Hybrid Scheme), but not Tender B (RC Scheme);

RC Scheme not submitted to Buildings Department

(c)   on 16 November 2007, the superstructure plan based on the modified Hybrid Scheme was submitted to the Buildings Department (BD). The superstructure plan based on the RC Scheme had not been submitted to the BD;

(d)   in January 2008, the Steering Committee for the TKL Campus development project (Note 18) recommended to pursue the RC Scheme together with a list of cost reduction items for the Standing Committee's and Estates Committee's approval;

(e)   on 22 February 2008, members of the Standing Committee, Estates Committee and Steering Committee of the VTC were informed at the joint meeting of these three Committees that the RC Scheme, which had not been fully developed, was not ready for adoption and hence Tender B was not a genuine tender option (Note 19) that could be considered. The VTC Council Secretariat explained to the Committees that:

        (i)   the structural engineering consultant was still advising on changes to the construction specifications for the RC Scheme, and these changes would likely result in additional costs and might not be acceptable to the designer of the campus due to impacts on his original design; and

        (ii)   the drawings of the RC Scheme had not yet been cleared by the BD, and there could be other uncertainties and possibly more variations as the option was further developed. Some of the variations identified involved substantive items which required retendering of the contract and would push back the project timeline by about six months.

      The three Committees finally endorsed undertaking pre-contract variation discussions with the lowest tenderer of Tender A; and

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Note 18:   *The VTC set up a Steering Committee under the Estates Committee to steer, oversee and monitor the progress of the TKL Campus development project. The terms of reference of the Steering Committee was at Appendix J.*

Note 19:   *In response to Audit enquiry, the VTC informed Audit in September 2017 that Tender B was not a genuine tender because the RC Scheme was a fall-back option (see para. 3.23) and no detailed design and no submission to the BD were made for Tender B.*

Modified Hybrid Scheme approved by VTC Council

(f)   at the joint meeting of the Estates and Steering Committees of the VTC on 14 April 2008, members endorsed the recommendation to accept the tender for the superstructure contract submitted by the lowest tenderer of Tender A at an estimated cost of $1,099.3 million, after having taken into account cost reductions from the pre-contract variations. The recommendation was subsequently approved by the VTC Council on 18 April 2008.

3.23   In response to Audit enquiry, the VTC informed Audit in September 2017 that since April 2007, the modified Hybrid Scheme had been adopted and the RC Scheme had been considered only as a fall-back option. However, Audit noted that there was no documentary evidence showing that the VTC Council or the committees had ever been explicitly informed that the RC Scheme had been considered only as a fall-back option.

More accurate information should have been provided to the VTC Council and the committees

3.24   Audit examination of the meeting minutes of the VTC Council and the committees revealed that more information should have been provided to the VTC Council and the committees. Audit noted that:

(a)   the CCG had not informed the Council and the Steering Committee, Standing Committee and Estates Committee of the VTC of the change of structural design leading to an increase of the project cost estimate by $71.3 million from $992.8 million to $1,064.1 million on 15 June 2007;

(b)   in June and August 2007 respectively, the Estates Committee and the Steering Committee of the VTC were informed that *"the campus designed by the design team is a composite reinforced concrete and steel structure"*. However, the VTC Council and the committees were not informed of the cost implications due to change of structural design;

(c)   in January 2008, the Steering Committee for the TKL Campus development project recommended to pursue the RC Scheme together with a list of cost reduction items for the VTC Standing Committee's and VTC Estates

Committee's approval. However, the Steering Committee was not informed that:

(i)   the project team had only submitted the superstructure drawings for the modified Hybrid Scheme to the BD and the drawings had already been approved; and

(ii)   the superstructure drawings for the RC Scheme were not submitted to the BD for approval; and

(d)   at the joint meeting of the Standing Committee, Estates Committee and Steering Committee of the VTC held in February 2008 (see para. 3.22(e)), it was reported that the drawings of the RC Scheme had not yet been cleared by the BD. Audit noted that the three Committees had not been informed of the reason for the drawings of the RC Scheme not having been cleared by the BD, which was attributable to the fact that the project team had not submitted the drawings of the superstructure based on the RC Scheme to the BD for clearance.

3.25   For capital projects, various development schemes may be available to take forward the project. In the case of the HKDI, available development schemes were the RC Scheme, Steel Scheme, Hybrid Scheme and modified Hybrid Scheme. No documentary evidence was available to show that the schemes had been thoroughly discussed and that the modified Hybrid Scheme had been well justified.

Foundation was built for RC Scheme

3.26   According to the pros and cons analysis of the structural schemes submitted to the CCG in March 2007 (see Table 15 in para. 3.14), the RC Scheme would incur the highest foundation cost among the three structural schemes. Audit examination of the project records revealed that the plan of foundation for the HKDI was drawn up in February 2007 based on the assumption that a full RC structural design would be adopted for the superstructure of the HKDI.

3.27   In April 2007, the project consultant informed the CCG that the current design was based on a composite structure of RC and steel (see para. 3.15). However, no record was available showing that the project team had taken action to revise the foundation plan according to the modified hybrid superstructure and to reduce the cost of the foundation. The tender exercise carried out in May 2007 for the foundation works was based on the assumption of a full RC superstructure. In response to Audit enquiry, the VTC informed Audit in September 2017 that this was to allow for the possibility of reverting to the RC Scheme, which remained as a fall-back option as Tender B, in case Tender A was not affordable. The Council approved the award of Tender A with pre-contract variations on 18 April 2008. By that time the foundation works had largely been completed as programmed to avoid delay and higher cost.

Project progress reports not submitted to EDB

3.28   According to Financial Circular No. 9/2004, a Controlling Officer shall require a subvented organisation to submit project progress reports together with updated budget forecasts and outturn income and expenditure statements upon approval of capital subventions and thereafter at quarterly intervals.

3.29   Audit noted that, after approval of FC funding, the EDB had not required the VTC to submit progress reports together with updated budget forecasts and outturn income and expenditure statements at quarterly intervals for the TKL Campus development project. In response to Audit enquiry, the EDB informed Audit in August 2017 that:

  (a)   progress of capital works projects of the VTC including progress reports would be submitted to the Estates Committee of the VTC with meetings held around three to four times a year. The ArchSD is a member of the Estates Committee; and

  (b)   major issues which involved a matter of principle or substantial implications would require endorsement from the VTC's Finance Committee, Standing Committee and/or the Council of the VTC before implementation. With a representative in the VTC's Finance Committee, the Standing Committee and the Council, the EDB could tender its comments or raise queries on any works project if necessary.

3.30   Audit reviewed the meeting records of the Council, Standing Committee, Estates Committee and Steering Committee of the VTC in the first year after project funding had been approved by the FC, i.e. for the period from July 2007 to June 2008. Audit noted that:

(a)   no reporting of outturn income and expenditure had been made in the Council meetings or Committee meetings; and

(b)   updated project budget forecast was only reported once in a Steering Committee meeting held in October 2007, but no representatives of the EDB or the ArchSD were present in the meeting.

Audit considers that the EDB needs to take measures to ensure that the VTC submits project progress reports together with updated budget forecasts and outturn income and expenditure statements quarterly for future government subvented projects as required by the Financial Circular.

Audit recommendations

3.31   **Audit has *recommended* that the Executive Director, VTC should, for future capital projects:**

(a)   **provide up-to-date cost estimate to the ArchSD for comments in seeking funding from the FC of LegCo;**

(b)   **take measures to ensure that agreement from the ArchSD is sought according to the VTC's Notes for Guidance on Capital Subventions before issuing tenders for the projects;**

(c)   **enhance project information provided to the Council and the relevant committees to facilitate them to make informed decisions;**

(d)   **take measures to ensure that before adopting a development scheme, the various schemes should be thoroughly discussed and the decision to adopt a particular scheme should be well justified and approved; and**

(e)   **take measures to ensure that the foundation of the project is developed according to the design of the superstructure.**

3.32   **Audit has *recommended* that the Secretary for Education should, for future government subvented projects, in accordance with Financial Circular No. 9/2004, take measures to ensure that the VTC submits to the EDB project progress reports together with updated budget forecasts and outturn income and expenditure statements upon approval of capital subventions and thereafter at quarterly intervals.**

Response from the VTC and the Government

3.33   The Executive Director, VTC agrees with the audit recommendations in paragraph 3.31. She has said that:

(a)   in a paper presented in the joint meeting of the Standing Committee, Estates Committee and Steering Committee of the VTC on 18 January 2008, it was stated that *"at its meeting on 26 October 2007, the Steering Committee noted that the cost estimates could well exceed the LegCo approved budget by over $100 million and asked that alternative scheme be explored. The Consultant Team has put forward a more economical alternative which would use reinforced concrete (RC) for the 4 towers and the sky platform, but which would be bulky in outlook"*. The paper indicated that the RC Scheme had been considered only as a fall-back option while the modified Hybrid Scheme was adopted. Because the RC Scheme was a fall-back option, only the detailed design of the adopted modified Hybrid Scheme was submitted to the BD for approval. If the RC Scheme was also submitted to the BD for approval, it would supersede the approval of the modified Hybrid Scheme;

(b)   the VTC has, since 2014, provided to the Estates Committee details of project information and up-to-date cost estimates to the ArchSD for comments in seeking funding from the FC; and

(c)   measures will be taken to ensure thorough discussion on scheme adoption for Government subvented projects.

3.34   The Secretary for Education agrees with the audit recommendation in paragraph 3.32. He has said that since March 2017, the EDB has requested the VTC to submit progress reports to the EDB on the on-going capital works projects at quarterly intervals. He has also said that the EDB will ensure that quarterly progress reports are submitted for upcoming capital works projects, and the bureau will closely

monitor the progress of the projects to ensure compliance with the relevant Financial Circular.

Management of campus

Opening up sports and amenity facilities to the public

3.35   In June 2007, when seeking funding from the FC of LegCo for the construction of the new TKL Campus, the EDB informed the FC that student sports and amenity facilities (i.e. swimming pool, basketball courts, tennis court and gymnasium (Note 20)) at the new campus would be open to the public during non-school hours as suggested by the Sai Kung District Council.

3.36   Audit noted that the swimming pool, the basketball courts and the multi-purpose hall (Note 20) have been open to the public since October 2010. However, the tennis court had not been open to the public. In response to Audit enquiry, the HKDI informed Audit in September 2017 that the tennis court was located on the ninth floor of the campus. The campus management had great concerns on the campus safety and security, and that additional resources would be incurred on the administration and security manpower for the operations during non-school hours. Audit noted that:

(a)   in the period 2010 to 2013, the HKDI planned to open the tennis court to the public. In May 2010, the HKDI informed the Sai Kung District Council that the tennis court would be open to the public. In July 2012, the Campus Executive Committee (CEC) of the TKL Campus planned that the tennis court would be open to the public in September 2012. In January 2013, the Campus Secretariat prepared costing and resource arrangement for the operation of the tennis court for public use;

(b)   there were requests from members of the Sai Kung District Council to open the tennis court to the public; and

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Note 20:   *The location of the planned gymnasium is used as a multi-purpose hall. The HKDI advised Audit that under the agreed arrangement with the Sai Kung District Council, the multi-purpose hall is open to the public during non-school hours for badminton as well as other indoor sports activities.*

(c)   according to the statistics of the Leisure and Cultural Services Department, for the period from 1 to 15 June 2017, the utilisation rate of the six tennis courts in Tseung Kwan O district during non-school hours (Note 21) was 88%.

The HKDI needs to further explore the feasibility of opening the tennis court to the public during non-school hours.

Utilisation of teaching venues

3.37   The HKDI uses a computerised timetabling system to manage and record the allocation of timeslots of its teaching venues (e.g. lecture theatres, classrooms and workshops) among various academic departments and operational units.   Any timeslots not allocated are available for booking by staff.   All booking records are also captured in the system.

3.38   *Incorrect utilisation rates of some teaching venues.*   The HKDI periodically calculated the utilisation rates of teaching venues for management information.   The intention was to exclude the utilisation after 6:30 pm on weekdays and on weekends. However, some of the teaching venues (e.g. computer laboratories and the digital visual effects studio) were also occupied after 6:30 pm on weekdays and on weekends.   The utilisation rates reported were overstated because number of hours available did not include hours after 6:30 pm on weekdays and on weekends while number of hours booked included booked hours in such period.   For example, for Semester 1 of 2016/17, the utilisation rates of the following teaching venues were overstated (see Table 16).

Note 21:   *The utilisation rate calculated by the Leisure and Cultural Services Department for the six tennis courts in Tseung Kwan O district covered the period from 6:00 pm to 11:00 pm on weekdays, and whole day on Saturdays, Sundays and public holidays. These hours are about the same as the non-school hours of the HKDI.*

Table 16

Examples of teaching venues with utilisation rates overstated
(Semester 1 of 2016/17)

Teaching venue	Total no. of hours booked (a)	No. of hours booked after 6:30 pm on weekdays and on weekends (b)	Utilisation rate reported to management (c) = (a) / 750 ×100% (Note) (%)	Actual utilisation rate (d) = [(a) – (b)] / 750 ×100% (Note) (%)	Difference (e) = (c) – (d) (%)
Fashion Technology Workshop	547	141.5	73%	54%	19%
Digital Visual Effects Studio	721	147	96%	77%	19%
Computer Game Laboratory	695.5	138	93%	74%	19%
Computer Lab	571	91	76%	64%	12%
Classroom	665	85	89%	77%	12%

Source: Audit analysis of HKDI records

Note: Semester 1 of 2016/17 lasted for 15 weeks. Total number of hours available for booking was defined as: number of hours available for booking per weekday (10 hours from 8:30 am to 6:30 pm) × number of weekdays per week (5 days) × number of weeks in the semester (15 weeks). The total number of hours available for booking in the semester was: 10 hours per day × 5 days per week × 15 weeks = 750 hours.

Room for increasing the use of the Auditorium for event rental

3.39   When seeking funding from the FC of LegCo in June 2007 for the construction of the TKL Campus, the FC was informed that, if available, the Auditorium would be available for event rental by the public. The Auditorium is available for booking on weekdays, weekends as well as public holidays. Audit examination of the booking records of the Auditorium for the period from 2013/14 to 2016/17 revealed that there was room for increasing the use of Auditorium for event rental (see Table 17). Audit noted that:

   (a)   for 81 to 129 days a year, the Auditorium was closed for maintenance; and

   (b)   usage of the Auditorium by external parties was on the low side, ranging from 2 to 10 days a year.

Audit considers that the HKDI needs to review the reasons for the large number of days needed for maintenance and take measures to reduce the number of days of maintenance. It also needs to consider promoting the availability of the Auditorium for event rental.

Table 17

**Analysis of the booking of the Auditorium
(2013/14 to 2016/17)**

	No. of days			
	2013/14	**2014/15**	**2015/16**	**2016/17**
Not available for booking due to maintenance	81 (27%)	129 (44%)	112 (38%)	103 (35%)
Occupied by HKDI and other VTC member institutions	176 (60%)	148 (50%)	138 (47%)	178 (60%)
Occupied by external parties	10 (3%)	3 (1%)	2 (0%)	3 (1%)
Not occupied	29 (10%)	16 (5%)	44 (15%)	12 (4%)
Total (Note)	296 (100%)	296 (100%)	296 (100%)	296 (100%)

Source: Audit analysis of HKDI records

Note: According to the HKDI, total number of days available for booking should be counted with due consideration of the manpower constraint at the Auditorium. This referred to the absence of manpower to provide support service during rest days, general holidays and statutory holidays in any given year. In case an event was held on any of these non-working days and support service was required, alternative holidays would be arranged for the staff who needed to work on these non-working days.

Need to improve booking of basketball courts and multi-purpose hall by public

3.40   *Basketball courts.*   There are two basketball courts in the HKDI. They are open for booking by the public at a fee of $80 per court per hour during non-school hours. Audit examined the booking records of the basketball courts during non-school hours for the period from 2015/16 to 2016/17 and noted that the utilisation rates ranged from 5% to 19% per semester (see Table 18).

Table 18

**Utilisation rates of basketball courts during non-school hours
(2015/16 and 2016/17)**

	Utilisation rate
2015/16	
Semester 1	19%
Semester 2	14%
Semester 3	11%
2016/17	
Semester 1	13%
Semester 2	9%
Semester 3	5%

Source: Audit analysis of HKDI records

3.41   Booking of the basketball courts can only be made in person at the Campus Secretariat during office hours (i.e. from 9:00 am to 6:00 pm on weekdays and 9:00 am to 12:00 noon on Saturdays).   User can only make one booking per day (an hour per court per booking), and no on-the-day booking will be accepted.   The HKDI may consider relaxing its booking rules (e.g. allowing telephone reservation and accepting on-the-day booking), with a view to facilitating the booking of the basketball courts for use during non-school hours.

3.42   *Multi-purpose hall.*   There are two badminton courts in the multi-purpose hall.   The hall is open for use by the public for badminton and other indoor sports activities by booking at a fee (Note 22).   Audit examined the booking records of the multi-purpose hall and noted that usage of the hall by external parties was on the low side, involving 2% (70 out of 3,279 hours) and 3% (99 out of 3,540 hours) of the total available hours of the hall during the semesters in 2015/16 and 2016/17 respectively.

Note 22:   *As at 1 September 2017, the hire charge of the multi-purpose hall was $695 per hour.*

3.43   Booking of the multi-purpose hall is governed by the VTC's hire of accommodation procedures. Applications for hiring can only be made by organisations but not by individuals. Applications are normally accepted up to four months in advance and at the latest, one month before the start date of the hiring period. Minimum hire period is two hours.   The multi-purpose hall must be hired as a whole, and the badminton courts cannot be hired separately.   The HKDI may consider relaxing its booking rules for the multi-purpose hall (e.g. allowing bookings by individuals and booking of only one badminton court but not the whole hall), with a view to facilitating the booking of the multi-purpose hall for use during non-school hours.

Management of lifts and escalators

3.44   There are 13 lifts and 4 escalators (2 long ones and 2 short ones) at the TKL Campus. Two lifts serve IVE(LWL) and eleven lifts and four escalators serve the HKDI. Three contractors were engaged for providing routine maintenance and services of the lifts and escalators installed (see Table 19). The maintenance and services were managed regardless of whether the lifts/escalators serve the HKDI or IVE(LWL).

Table 19

**Contractors of lifts and escalators
(1 April 2015 to 31 March 2021)**

Lift/escalator	Registered contractor	Contract period
L1 − L11	Contractor 1	1 April 2016 − 31 March 2021
L12 − L13	Contractor 2	1 April 2016 − 31 March 2021
E1 − E4	Contractor 3	1 April 2015 − 31 March 2018

Source: HKDI records

3.45 *Malfunction of lifts and escalators*. Under the Lifts and Escalators Ordinance (Cap. 618), a log book should be kept for each lift and escalator to record all major events, including lift and escalator failure. Audit examined the log books of the 13 lifts and 4 escalators at the TKL Campus for the period from 2014 to 2016 and noted that the number of breakdown cases of lifts and escalators had increased by 174% from 53 cases in 2014 to 145 cases in 2016. Audit further noted that in 2015 and 2016, 12 (i.e. 71%) of the 17 lifts and escalators had each broken down six times or more. One of them had broken down 16 times in 2015 and another had broken down 26 times in 2016 (see Table 20).

Table 20

**Analysis of breakdown cases of lifts and escalators
(2015 and 2016)**

No. of breakdown cases	No. of lifts/escalators		Total no. of breakdown cases involved
	2015	**2016**	
0	0	1	0
1 − 5	5	4	23
6 − 10	5	7	89
11 − 15	6	4	129
16 − 20	1 }12(71%)	0 }12(71%)	16
21 − 25	0	0	0
26	0	1	26
Total	17	17	283

Source: Audit analysis of HKDI records

3.46   ***Need to improve monitoring of contractors' performance.***   All three routine maintenance and service contracts stipulate that the monthly system service availability (Note 23) shall be maintained at at least 99%. Audit noted that the service availability records were not available and the HKDI had not monitored the system service availability.

3.47   Audit examination of the log books of the 13 lifts and 4 escalators revealed that the monthly system service availability of the 4 escalators had decreased from 99.7% in January 2015 to 71.0% in June 2017. The number of months in which the monthly system service availability was lower than 99% had increased from two in 2015 to six in 2016. In the six months from January to June 2017, the monthly system service availability was lower than 99% in four months (see Table 21).

Table 21

**Audit analysis of the monthly system service availability of the four escalators
(January 2015 to June 2017)**

Monthly system service availability	No. of months		
	2015	**2016**	**2017 (up to June)**
99% or above	10	6	2
80% − 98%	2	6	2
79% or below	0	0	2
Total	12	12	6

Source: Audit analysis of HKDI records

Note 23:   *According to the routine maintenance and service contracts,* "*service availability*" *is defined as:*

$$1 - \frac{\textit{Total downtime}}{\textit{Total operating time}} \times 100\%$$

Total downtime is the total loss of operating hours of each lift due to lift failures. Downtime due to scheduled maintenance works is not included. Total operating time is the total time that the lift/escalator is expected to be operating during the period concerned.

3.48 The escalator maintenance and service contractor was required to respond to all escalator failures by having staff on site within 1 hour to attend to the situation. Table 22 below summarises the cases where the contractor had failed to comply with the one-hour response requirement during the period January 2015 to June 2017. No record was available showing that the HKDI or VTC had taken follow-up action with the contractor.

Table 22

**Audit analysis of the one-hour response requirement of the four escalators
(January 2015 to June 2017)**

Year	No. of delayed cases	Range of delays (minutes)
2015	2	10 to 158
2016	3	5 to 145
2017 (up to June)	2	10 to 25

Source: Audit analysis of HKDI records

3.49 *Suspension of service of two short escalators.* There were two short escalators (i.e. E1 and E2) between the ground and first floor with vertical rise of 6.2 metres (see Photograph 2). The two short escalators are available for public use during their operation hours (i.e. 7:30 am - 7:30 pm on Mondays to Fridays and 7:30 am - 12:30 pm on Saturdays, Sundays and public holidays). Audit examined the service records for the period from 1 January 2017 to 30 June 2017 of the two escalators and noted that the two escalators were suspended from operation in 21.2% (or 744 of the total 3,504 operating hours) of the available operating time because of adverse weather (see Table 23). In response to Audit enquiry, the HKDI said that in the absence of suitable roof and enclosure, the two short escalators were exposed to weather conditions. Their services needed to be suspended during rainy days or adverse weather conditions to eliminate potential hazards.

Photograph 2

Four escalators at HKDI

Two long escalators

Two short escalators
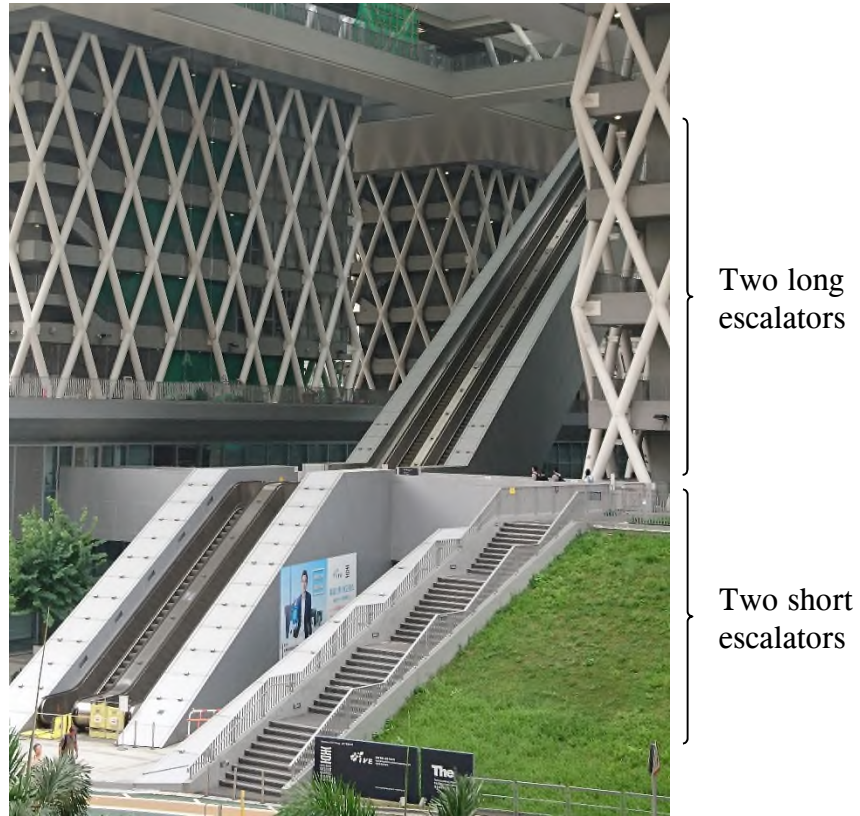
Source: Photograph taken by Audit on 22 August 2017

Table 23

**Suspension of services for two short escalators
(1 January 2017 to 30 June 2017)**

| Escalator | Operating time available (a) (Hour) | Suspension of services | | | Net operating time (e)＝(a)-(b)-(c)-(d) (Hour) |
		Breakdown (b) (Hour)	Maintenance (c) (Hour)	Rainfall (d) (Hour)	
E1	1,752.0	9.9	100.5	372.1	1,269.5
E2	1,752.0	19.3	100.5	372.1	1,260.1
Total	3,504.0 (100%)	29.2 (0.8%)	201.0 (5.8%)	744.2 (21.2%)	2,529.6 (72.2%)

Source: Audit analysis of HKDI records

3.50   ***Suspension of service of one long escalator.*** There were two long escalators (i.e. E3 and E4) between the first floor and seventh floor with vertical rise of 25.8 metres (Note 24) (see Photograph 2). The two long escalators are open for use of students and staff on weekdays from 7:30 am to 7:30 pm. Audit examined the service records for the period from 1 January 2017 to 30 June 2017 and noted that the two escalators had been suspended from operation a number of times. Up to 30 March 2017, the escalator E3 had been suspended for 43 hours out of 732 available operating hours due to breakdown and routine maintenance. Eighty-five steps of the escalator E3 were found damaged by the contractor on 30 March 2017. The replacement cost amounted to about $1 million. Since then, the escalator E3 had been suspended from operation. In response to Audit enquiry, the HKDI said in August 2017 that there was a contractual dispute with the contractor regarding the

Note 24:   *According to the Electrical and Mechanical Services Department, long escalators generally refer to those with vertical rise of more than 15 metres.*

escalator E3. Therefore, the related maintenance and service work could not be carried out and the escalator had been suspended from operation for 720 available operating hours in the period 31 March 2017 to 30 June 2017. The VTC has appointed a consultant in May 2017 to provide advice and study alternatives for the way forward. Meetings among consultant, escalator maintenance contractor and the VTC were held on 12 June 2017, 17 July 2017 and 27 July 2017. The consultant is currently preparing recommendations and a study report. In the meantime, students and teachers are using lifts or stairs to go to their classrooms and offices.

Unauthorised overnight parking

3.51   The HKDI does not allow overnight parking from 10:30 pm to 7:30 am the next day in the campus car park. Audit reviewed the records of the car park in the 5-month period from 1 January 2017 to 31 May 2017 and noted that there were 195 overnight parkings at 111 (74%) of the 151 nights in the period, involving 11 vehicles. In particular:

(a)   one vehicle parked for 97 nights (64% of 151 nights) in the period, the most among the 11 vehicles; and

(b)   one vehicle of a staff did not possess a valid parking permit issued by the HKDI.

Obstruction to emergency vehicle access (EVA)

3.52   There is an EVA provided at the TKL Campus. The purpose of the EVA is to allow safe and unobstructed access and safe operation of vehicles of the Fire Services Department. For safety reason, no parking should be allowed at places that will obstruct the EVA. During the period 19 May 2017 to 15 June 2017, Audit observed that illegal parking outside the EVA was common causing obstruction to the EVA. Sometimes, one or two private cars were parked in the public street at the entrance of the EVA. Sometimes as many as six private cars were parked there. For instance, at about noon on 14 June 2017, the EVA was obstructed by one roadside skip and six private cars (see Photograph 3).

Photograph 3

Obstruction to EVA

Source: *Photograph taken by Audit on 14 June 2017 at 12:33 pm*

Audit recommendations

3.53   **Audit has *recommended* that the Executive Director, VTC should:**

(a)   **further explore the feasibility of opening the tennis court to the public during non-school hours;**

(b)   **take measures to ensure the correctness of the utilisation rates of teaching venues;**

(c)   **review the reasons for the large number of days on which the Auditorium was closed for maintenance and take measures to address the problem;**

(d)   **step up the promotion effort on the availability of the Auditorium for event rental;**

(e)   **consider taking measures to facilitate the booking of the basketball courts and the multi-purpose hall by the public;**

(f)   **monitor the problem of repeated breakdown cases of the lifts and escalators and, if necessary, take action to address the problem;**

(g)   **ensure that the contractor attain the performance target on maintenance services under the maintenance and service contract of escalators at TKL Campus, including the service availability and response time to breakdown;**

(h)   **explore whether any measures can be taken to increase the operating time of the two short escalators;**

(i)   **endeavour to resume as soon as possible the service of the long escalator which had been suspended;**

(j)   **take measures to prevent unauthorised overnight parking at the campus carpark; and**

(k)   **take measures to keep the EVA unobstructed at all time.**

Response from the VTC

3.54   The Executive Director, VTC agrees with the audit recommendations. She has said that the HKDI:

(a)   will explore the feasibility on the opening of tennis court to the public during non-school hours, taking due consideration of the need of student extra-curricular activities and balanced utilisation of the facilities, campus security as well as manpower and resources to provide the administrative support for the operation;

(b)   will revise the formula of the utilisation rate calculation with the enhancements in the central computerised system;

(c)   will explore the possible measures to shorten the maintenance period of the Auditorium with due consideration of the safety issues, given that the existing non-occupancy rate was 8.5% on average in the past 4 years;

(d)   will review the booking rules of the basketball courts and the multi-purpose hall, taking due consideration of manpower and resources on the administrative support for the operation, while striking the balance between the student extra-curricular activities and public needs;

(e)   has monitored control of material delivery to avoid damage of lift doors by trolleys;

(f)   has taken immediate measures to prohibit unauthorised overnight parking at the campus carpark; and

(g)   has made proactive efforts in reporting the blockage of the EVA located outside campus area to the relevant government departments for follow-up, and will put more rigorous effort to report the problem.

PART 4: ADMINISTRATIVE ISSUES

4.1   This PART examines the following administrative issues:

(a)   inventory management (paras. 4.2 to 4.11);

(b)   staff recruitment (paras. 4.12 to 4.16);

(c)   campus environmental performance (paras. 4.17 to 4.27); and

(d)   management of computer retail shop (paras. 4.28 to 4.31).

Inventory management

4.2   The VTC has issued a Stores Manual, which incorporates the stores policies, guidelines and procedures. According to the Stores Manual of the VTC, inventory stores are:

(a)   non-consumable nature and should be of a unit purchase cost exceeding $5,000 or with expected life span over 3 years;

(b)   computer equipment including personal computer, notebook, workstation, server and specified peripherals (i.e. printer, scanner, monitor, memory card, tape backup system, writing pad and zip drive); or

(c)   custom-made software or system application.

Because many inventory items are shared between the HKDI and IVE(LWL), inventory controls (e.g. annual stocktakes) apply to TKL Campus as a whole. As at 25 May 2017, the value of the inventories at the TKL Campus amounted to about $231 million.

Some annual stocktaking not conducted

4.3   According to the inventory guidelines of the VTC:

   (a)   annual stocktaking should be conducted in each financial year; and

   (b)   results of the stocktaking should be submitted to the Chief Supplies Officer of the Supplies Section before the deadlines (usually in November or December of a financial year) specified by him.

4.4   Audit found that, in the 7 financial years 2010-11 to 2016-17, stocktaking had not been conducted for three financial years namely, 2010-11, 2012-13 and 2014-15. Stocktaking exercise for financial year 2016-17 was pending as at September 2017.

Long time taken to complete stocktaking exercises

4.5   According to the inventory guidelines of the VTC, on completion of the stocktaking exercises, the inspecting officers shall submit the stocktaking report. A long time had been taken to complete the three stocktaking exercises for financial years 2011-12, 2013-14 and 2015-16.   Hence, there was delay in the submission of stocktaking reports for these three stocktaking exercises to the Headquarters Supplies Section, ranging from 10.7 to 26.9 months (see Table 24).

Table 24

**Delay in completing stocktaking exercises and submitting stocktaking reports
(Financial years 2011-12 to 2015-16)**

Financial year	Deadline	Submission date	Delay (Month)
2011-12	15 December 2011	5 June 2013	17.7
2013-14	20 November 2013	17 February 2016	26.9
2015-16	18 December 2015	9 November 2016	10.7

Source: Audit analysis of HKDI records

Missing inventory items

4.6   A total of 810 inventory items of original cost of $2.7 million were found missing in the three annual stocktaking exercises for financial years 2011-12, 2013-14 and 2015-16 (see Table 25).   Amongst the 810 inventory items found missing, 623 (77%) were computer equipment; of which, 127 were desktop or notebook computers, 169 were peripherals (such as monitors, printers and scanners) and 209 were portable storage devices (i.e. external HDD drives and flash drives). According to the guidance note on data breach incident handling and notifications, the loss of staff or student personal data kept in laptop computers and USB flash drives is a data breach (Note 25), the data user shall take active remedial steps to lessen the harm or damage that may cause to the data subjects, such steps may include:

(a)   immediate gathering of essential information relating to the breach, such as what was the cause of the breach and what kind and extent of personal data were involved;

(b)   adapting appropriate measures to contain the breach, such as reporting to law enforcement agencies (e.g. the Police) and relevant regulators (e.g. the Privacy Commissioner);

(c)   assessing the risk of harm; and

(d)   giving of data breach notification to the data subjects.

However, there was no documentary evidence showing that the HKDI had taken these remedial steps to contain the harm or damage that might cause to the data subjects.

Note 25:   *A data breach is generally taken to be a suspected breach of data security of sensitive or confidential data held by a data user, exposing these data to the risk of loss, unauthorised or accidental access, processing, erasure or use.*

Table 25

Inventory items found missing during stocktaking exercises
(Financial years 2011-12 to 2015-16)

Financial year	Total number of items checked	Number of inventory items missing	Original store value ($)	Value at write off ($)
2011-12	11,204	347	917,907	44,074
2013-14	12,175	262	834,725	20,360
2015-16	13,488	201	945,838	12,613
Total	36,867	810	2,698,470	77,047

Source: HKDI records

No effective actions taken to prevent recurrence of loss of inventory items

4.7   It was stipulated in the Stores Manual that for loss or deficiency where the value of stores exceeds $50,000 and where no fraud, suspected fraud, theft or negligence is involved, the Head of Operational Unit concerned must certify that steps have been taken to prevent similar recurrence in future. In the three annual stocktaking exercises, the HKDI stated that a number of improvement measures had been taken:

   (a)   departments should maintain a control list of computer equipment and accessories for internal record of inventory location;

   (b)   departments should carry out surprise and full stock check and report irregularities by end of each year;

   (c)   proper internal ledger/record of in/out transactions should be maintained within the departments;

(d)   departments should increase the frequency of inventory inspection internally; and

(e)   the inventory users of all inventory items would be recorded clearly in the inventory list afterwards to prevent loss.

Up to September 2017, most of the improvement measures have not been implemented.

Other non-compliances with the Stores Manual

4.8   According to the Stores Manual:

(a)   internal stock verification should be conducted immediately prior to and immediately following the transfer of stores from one storage area to another; and

(b)   surprise stock and security checks should be carried out on each store unit at irregular intervals at least once every year. The officer conducting the check should record the findings in the Surprise Inspection Book.

4.9   Audit examination of the HKDI records revealed that the above inspections had not been carried out.

Audit recommendations

4.10   **Audit has *recommended* that the Executive Director, VTC should ensure that the HKDI:**

(a)   **conducts annual stocktaking in a timely manner in each financial year according to the inventory guidelines;**

(b)   **strengthens its inventory control to minimise loss of inventories;**

(c) **takes the remedial measures to contain the harm or damage that might cause to the data subjects as stipulated in the guidance note on data breach incident handling and notifications;**

(d) **effectively implements the improvement measures proposed after each stocktaking exercise and closely monitors the progress of implementation;**

(e) **conducts internal stock verification immediately prior to and immediately following the transfer of stores from one storage area to another; and**

(f) **conducts surprise stock and security checks on each store unit at irregular intervals at least once every year.**

Response from the VTC

4.11   The Executive Director, VTC agrees with the audit recommendations. She has said that:

(a) the HKDI will review and take more rigorous effort to enhance its procedures, controls and documentation in inventory management;

(b) the HKDI has taken immediate action to enhance staff awareness and compliance of VTC's policies on data security and protection; and

(c) overall measures to streamline the process and enhance efficiency in inventory management are being reviewed.

Staff recruitment

4.12   Under the existing VTC practices, recruitment of staff with contract duration of more than one year and/or open-ended contract are handled by the HRD of the VTC Headquarters. The HKDI regularly conducts recruitment exercises to fill vacant posts of its short-term contract staff/part-time staff.

Administrative issues

4.13   For a recruitment exercise, advertisements are placed in local newspapers, on the VTC website and job websites. The VTC issued a guide on recruitment and human resources matters (Human Resources Guide). According to the Human Resources Guide, applicants should be shortlisted for interview according to predetermined shortlisting criteria. A selection board should be formed to interview and select candidates for appointment. The performance of individual candidates during interviews should be recorded in a standard assessment form. A board report should be compiled to summarise the selection process and results. For recruitment of staff with contract duration of more than one year and/or open-ended contract, assessment forms and board reports should be forwarded to the Headquarters HRD for vetting.

Room for improvement in recruitment process

4.14   During the period April 2014 to March 2017, the HKDI conducted 170 recruitment exercises for short-term contract/part-time staff. Audit examined the records of 10 of the 170 recruitment exercises conducted during the period and found that there was room for improvement in the recruitment process. Details are as follows:

(a)   *Short application period.* According to the Human Resources Guide, the application period should normally be ten working days. Audit noted that, for four of the ten recruitment exercises, the application period was shorter than ten working days, ranging from five to nine working days; and

(b)   *Reasons for accepting late applications not documented.* According to the Human Resources Guide:

   (i)   late application should not be accepted, unless there is inadequate response to the recruitment exercise, and the late application has, prima facie, exceptional suitability to fill the vacant post; and

   (ii)   for any late application accepted, the justification should be recorded on file.

   In the ten recruitment exercises, Audit noted that of the 197 applications accepted, 4 (2%) were late applications. These 4 late applications were submitted one to eight days after the application deadlines. There was no records available showing the reasons for accepting these late applications.

Audit recommendations

4.15   **Audit has *recommended* that the Executive Director, VTC should:**

(a)   **ensure that the HKDI allows sufficient application period in the recruitment exercises;**

(b)   **ensure that late applications are not accepted unless fully justified; and**

(c)   **ensure that the reasons for accepting late applications are properly documented.**

Response from the VTC

4.16   The Executive Director, VTC agrees with the audit recommendations. She has said that the HKDI has taken measures to ensure adherence to staff recruitment guide.

Campus environmental performance

Campus environmental targets not met

4.17   It is one of the VTC's environmental policies to reduce waste and consumption of resources, such as water, paper and electricity. The Corporate Environmental Office (CENO) of the VTC Headquarters is tasked to support environmental enhancement of the VTC and set environmental targets for compliance by various campuses.

4.18   The Safety, Health, Environmental Local Committee, comprising representatives from operational units of the campus, was set up to coordinate and implement actions as suggested by the CENO and report to the CEC on the progress of safety, health and environmental issues.

Administrative issues

4.19 Using the 2013/14 as the reference year, the CENO set the following campus environmental targets for a two-year review period from 2014/15 to 2015/16:

  (a) 5% reduction on water consumption;

  (b) 5% reduction on electricity consumption; and

  (c) 5% reduction on quantity of paper ordered.

Interim evaluation would be conducted on an annual basis while a comprehensive review would be carried out every two years. The CENO would suggest remedial measures to address areas of non-achievement, as well as measures to meet the common environmental targets. The CENO would call returns of use of resources from local campus and compile progress reports against targets set.

4.20 For 2014/15 and 2015/16, two of the three campus environmental targets (i.e. 5% reduction on electricity consumption and 5% reduction on the quantity of paper ordered) were not achieved (see Table 26). In particular:

  (a) the electricity consumption only slightly decreased by 0.2% and 0.9% in 2014/15 and 2015/16 compared with 2013/14; and

  (b) there was an increase of 6.3% in the quantity of paper ordered in 2014/15 compared with 2013/14.

Table 26

Achievement of campus environmental targets
(2013/14 to 2015/16)

	2013/14	2014/15	2015/16
(a) Water consumption			
Consumption (m³)	25,543	21,480	22,451
Consumption per student (m³)	3.2	2.7	2.8
Increase/(Decrease) per student (%)	N/A	(15.6%)	(12.5%)
Target met	N/A	✓	✓
(b) Electricity consumption			
Consumption (kWh)	8,375,953	8,368,569	8,309,847
Consumption per student (kWh)	1,052	1,050	1,043
Increase/(Decrease) per student (%)	N/A	(0.2%)	(0.9%)
Target met	N/A	✘	✘
(c) Quantity of paper ordered			
Order of paper (reams − Note)	12,999	13,910	12,772
Order of paper per student (reams − Note)	1.6	1.7	1.6
Increase/(Decrease) per student (%)	N/A	6.3%	0%
Target met	N/A	✘	✘

Legend: ✓ − Yes
         ✘ − No
         N/A − Not applicable

Source: Audit analysis of HKDI records

Note: There are 500 sheets of paper in a ream

4.21   The progress of achievement on campus environmental targets in 2014/15 and 2015/16 was reported to the Safety, Health, Environment Local Committee, the CEC and the CENO. To address the non-achievement of environmental targets, the following remedial measures were put forward by the HKDI in both 2015 and 2016:

(a)   adopting energy saving lighting for replacement;

(b)   monitoring air-conditioning operations and shortening its operation hours;

(c)   installing timer to control lighting/air-conditioning operations; and

(d)   controlling the paper consumption and encouraging the operational units to promote e-copy.

However, there was no documentary evidence showing how these broad directions had been implemented.

Need to expedite action to take forward the consultant's recommendations

4.22   In April 2016, in order to review energy consumption and improve energy efficiency of the TKL Campus, VTC engaged a consultant to conduct an energy audit (Note 26).

4.23   In November 2016, the consultant completed the energy audit and identified several energy saving opportunities to enhance the energy performance which included:

(a)   replacing existing fluorescent lamps with Light Emitting Diode tubes (with estimated investment cost of $1.181 million and payback period of 3.9 years);

(b)   installing energy efficient fan coil unit (with estimated investment cost of $50,000 and payback period of 6.5 years); and

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Note 26:   *Energy audit is a review of how and where energy is consumed in the organisation. It helps identify energy management opportunities where savings of energy and money can be made.*

(c)   installing static pressure control for fresh air system (with estimated investment cost of $0.5 million and payback period of 10.6 years).

4.24   The consultant recommended the VTC to:

(a)   enhance the overall energy performance in the campus;

(b)   incorporate energy metering and monitoring facilities for continuous and better monitoring of the energy consumption of the Central Building Services Installations (Note 27) in the campus; and

(c)   conduct further investigation such as feasibility study, detailed implementation plan, etc. so as to accurately evaluate the potential saving and implementation cost.

4.25   In response to Audit enquiry, the VTC informed Audit in September 2017 that the recommendations of the consultancy report were still being followed up by the Safety, Health and Environment Task Force and Central Committee on Safety, Health and Environment.

Audit recommendations

4.26   **Audit has *recommended* that the Executive Director, VTC should:**

(a)   **endeavour to achieve the campus environmental targets;**

(b)   **review the environmental measures periodically to ensure that they are effective; and**

(c)   **devise an implementation plan to take forward the consultant's recommendations so as to enhance the overall energy performance.**

Note 27:   *Examples of Central Building Services Installations include Central Chiller Plant, Chilled Water Distribution System, Unitary Air Conditioning System, etc.*

Response from the VTC

4.27　　The Executive Director, VTC agrees with the audit recommendations.　She has said that:

(a)　　the CENO will propose ways to enhance environmental awareness among staff and students in the HKDI; and

(b)　　the Estates, Health and Safety Division has devised an implementation plan to enhance the overall energy performance in the campus.

Management of computer retail shop

4.28　　In HKDI, there is a computer retail shop.　Since June 2010, the VTC had entered into three service contracts with a computer service provider (CSP) (Note 28) (see Table 27).　The CSP provides a one-stop service relating to sales of computer software and hardware at educational discount and organises training workshops at the TKL Campus for VTC students and staff.　The retail store has a floor area of 31.73 m^2.

Note 28:　*The CSP is an authorised education reseller and authorised service provider of the branded computer product company.*

Table 27

Computer service contracts
(15 June 2010 to 14 May 2018)

	Contract period	**Monthly licence fee**
1	15 June 2010 to 14 May 2013 (Note 1)	− $14,000 (first 24 months) − $18,000 (subsequent 12 months)
2	15 May 2013 to 14 May 2016 (Note 1)	$40,000
3	15 May 2016 to 14 May 2018 (Note 2)	$40,000

Source: HKDI records

Note 1: The first and second contracts were two-year fixed term contracts extendable for one year.

Note 2: The contract was a one-year fixed term contract extendable for one year.

4.29   Audit noted that the CSP did not comply with the requirements laid down in the service contracts:

(a)   ***Sales information not submitted.*** Sales information is important for setting the minimum licence fee of similar service contract in future. According to the service contracts, the CSP should provide the VTC with the information on the volume of business, including types and quantities of items sold to HKDI students and staff plus total sales in dollar value on an annual basis. The CSP did not provide such information for the first and second contracts and the HKDI did not ask the CSP to provide such information for the third contract:

(i)   the CSP did not provide the required sales information for the first contract. In January 2013 (i.e. four months before the end of the first contract), the HKDI asked the CSP to provide the monthly sales figures since the beginning of the contract in June 2010. However, the CSP said that they were not allowed by the reseller agreement with the branded computer product company to disclose such information; and

(ii)   the HKDI asked the CSP in February 2016, three months before the end of the second contract, for sales information for the second contract. The CSP only provided the total volume of business for 2013 to 2015 without sales in dollar value and detailed breakdown by types of items to the HKDI;

(b)   *Number of on-campus workshops fewer than required.* According to the service contracts, the CSP should arrange for a minimum of two free on-campus workshops every six months for staff and students of the VTC. Audit noted that the CSP did not arrange sufficient number of workshops in 5 (63%) of 8 half-yearly periods from May 2013 to April 2017. Only 9 workshops had been arranged in the 8 half-yearly periods. The record on workshops arranged for the first contract was not available;

(c)   *Annual reports not submitted.* According to the second service contract, the CSP should provide annual reports on the programmes/workshops/ seminars/events/activities organised within 3 months after the completion of services of each year. Audit noted that the CSP did not submit the three annual reports required for the second contract; and

(d)   *Insurance not taken out as required.* According to the service contracts, the CSP should effect and maintain at all times comprehensive insurance at its own expense in relation to claims against the VTC and the CSP arising as a result of the CSP's negligence. Audit noted that:

(i)   except for the periods 24 April 2014 to 23 April 2016 and 24 April 2017 to 23 April 2018, comprehensive insurance was not taken out as required to provide the necessary insurance coverage; and

(ii)   the insurance policy for periods 24 April 2014 to 23 April 2016 and 24 April 2017 to 23 April 2018 only covered claims against the CSP instead of the VTC and the CSP.

Audit recommendation

4.30   **Audit has *recommended* that the Executive Director, VTC should ensure that the CSP complies with all the requirements laid down in the service contracts.**

Response from the VTC

4.31   The Executive Director, VTC agrees with the audit recommendations. She has said that the HKDI will take measures to ensure that the CSP complies with all requirements laid down in the service contract.

**Member institutions of the VTC
(2017)**

1. Technological and Higher Education Institute of Hong Kong

2. Institute of Professional Education and Knowledge

3. School for Higher and Professional Education

4. Hong Kong Institute of Vocational Education

5. HKDI

6. Hotel and Tourism Institute

7. Chinese Culinary Institute

8. International Culinary Institute

9. Maritime Services Training Institute

10. Youth College

11. Pro-Act by VTC

12. Integrated Vocational Development Centre

13. Shine Skills Centre

Source: *VTC records*

**HD programmes offered by HKDI
(2016/17)**

	Programme	Subvented / Self-financed
Department of DFS		
1	Visual Arts and Culture	Subvented
Department of CDM		
2	Creative Media	Subvented
3	Film and Television	Subvented
4	Digital Music and Media	Subvented
5	Visual Communication	Subvented
6	Publication Design and Print Media	Subvented
7	Transmedia	Subvented
8	Advertising Design	Self-financed
Department of FID		
9	Fashion Image Design	Subvented
10	Fashion Branding and Buying	Subvented
11	Fashion Media Design	Subvented
12	Costume Design for Performance	Subvented
13	Fashion Design Menswear	Subvented
14	Fashion Design	Self-financed
Department of PID		
15	Product, Interior and Exhibition Design (Subject Group)	Subvented
16	Architectural Design	Subvented
17	Landscape Architecture	Subvented
18	Jewellery and Image Product Design	Subvented
19	Furniture and Lifestyle Product Design	Subvented
20	Stage and Set Design	Subvented
21	Jewellery Design and Technology	Subvented

Source: HKDI records

HKDI: Organisation chart
(30 June 2017)

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                    ┌─────────────────────────┐
                    │        Principal/       │
                    │ Academic Director (Design)│
                    │         (Note)          │
                    └─────────────────────────┘
              ┌──────────────┴──────────────┐
┌─────────────────────────┐      ┌─────────────────────────┐
│ Vice Principal (Academic)/│    │ Vice Principal (Administration)│
│ Deputy Academic Director  │    │                         │
│       (Design)           │    │                         │
│        (Note)            │    │                         │
└─────────────────────────┘      └─────────────────────────┘
         │    ┌────────────────────────┐   │   ┌──────────────────┐
         │    │ Associate Academic Director│  │  │ Institute Secretary │
         │    │       (Design)          │   │  └──────────────────┘
         │    └────────────────────────┘   │
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| Academic Departments (Administration)*
 - DFS
 - CDM
 - FID
 - PID | Language Centre | | Campus Secretariat | Learning Resources Centre | Student Development Office | Technical Support Unit | Finance and Supplies Office |

| Academic Departments (Development)*
 - DFS
 - CDM
 - FID
 - PID | Professional Education and Engagement Centre* | Research Units | Design Discipline Planning Office* | Facilities Management Office | External Affairs Office |

Legend: * Except for the four Academic Departments (DFS, CDM, FID and PID), the Design Discipline Planning Office and the Professional Education and Engagement Centre, all other staff and operating units provide administrative and supporting services to both the HKDI and IVE(LWL).

Source: HKDI records

Note: The Principal and Vice Principal also serve as the Academic Director and Deputy Academic Director of the Design Discipline respectively.

Design Discipline Boards and Committees
(30 June 2017)

Executive function

Advisory boards

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                        ┌─────────────────┐
                        │   The Council   │
                        │     of VTC      │
                        └─────────────────┘
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| The Council of VTC |

| Vocational Education and Training Academic Board (VETAB) |
| Design Institute Advisory Board (DIAB) |

| Design Discipline Academic Committee (DEAC) |
| Design Discipline Advisory Board (DEDAB) |

| Programme Boards of CDM, FID, PID and Visual Arts |
| Design Discipline Quality Assurance Committee (DEQAC) |
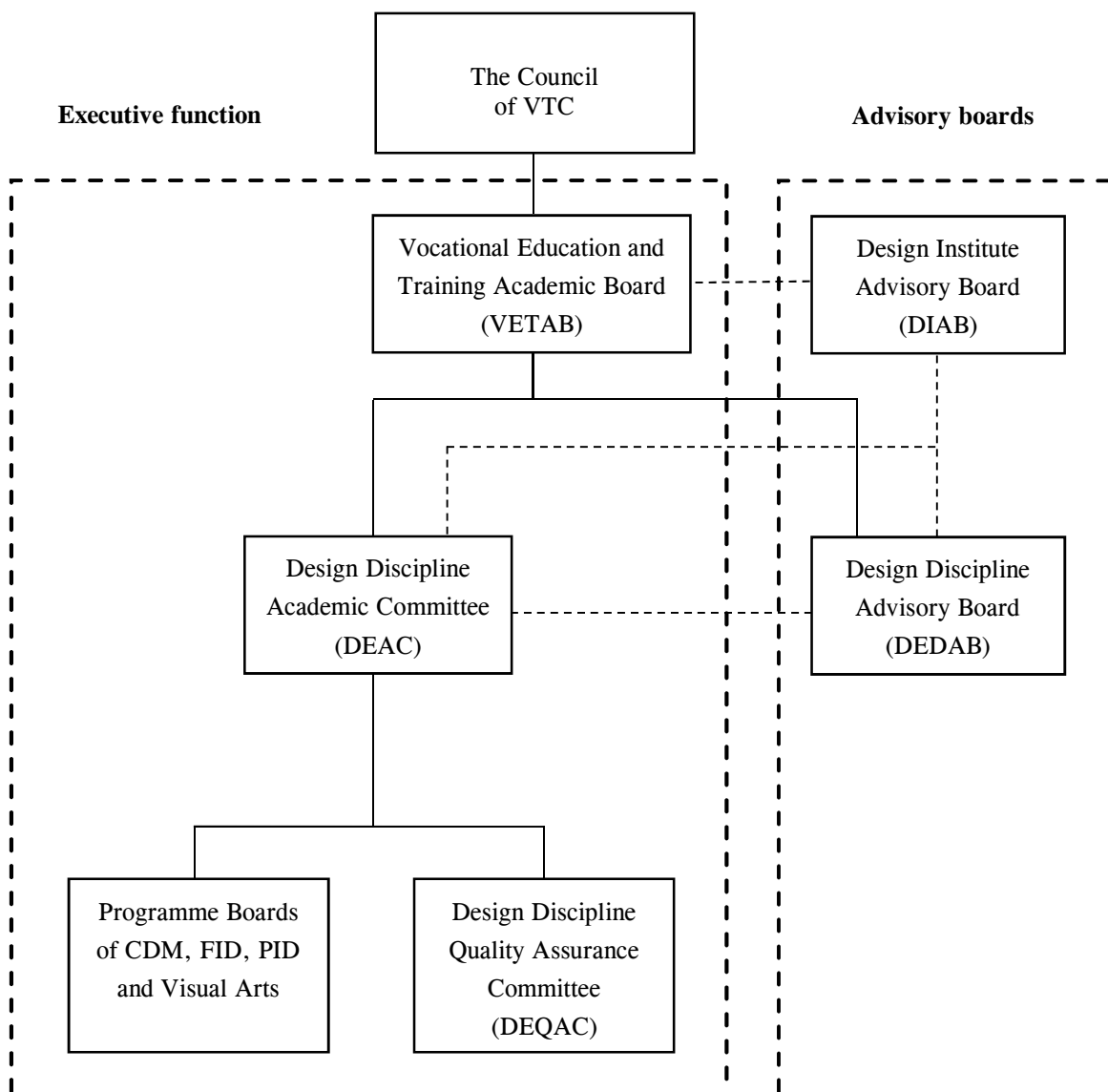
Legend: ------ Close liaison with each other, but no formal reporting
         ———   Reporting line

Source: HKDI records

Procedures for development of a new programme

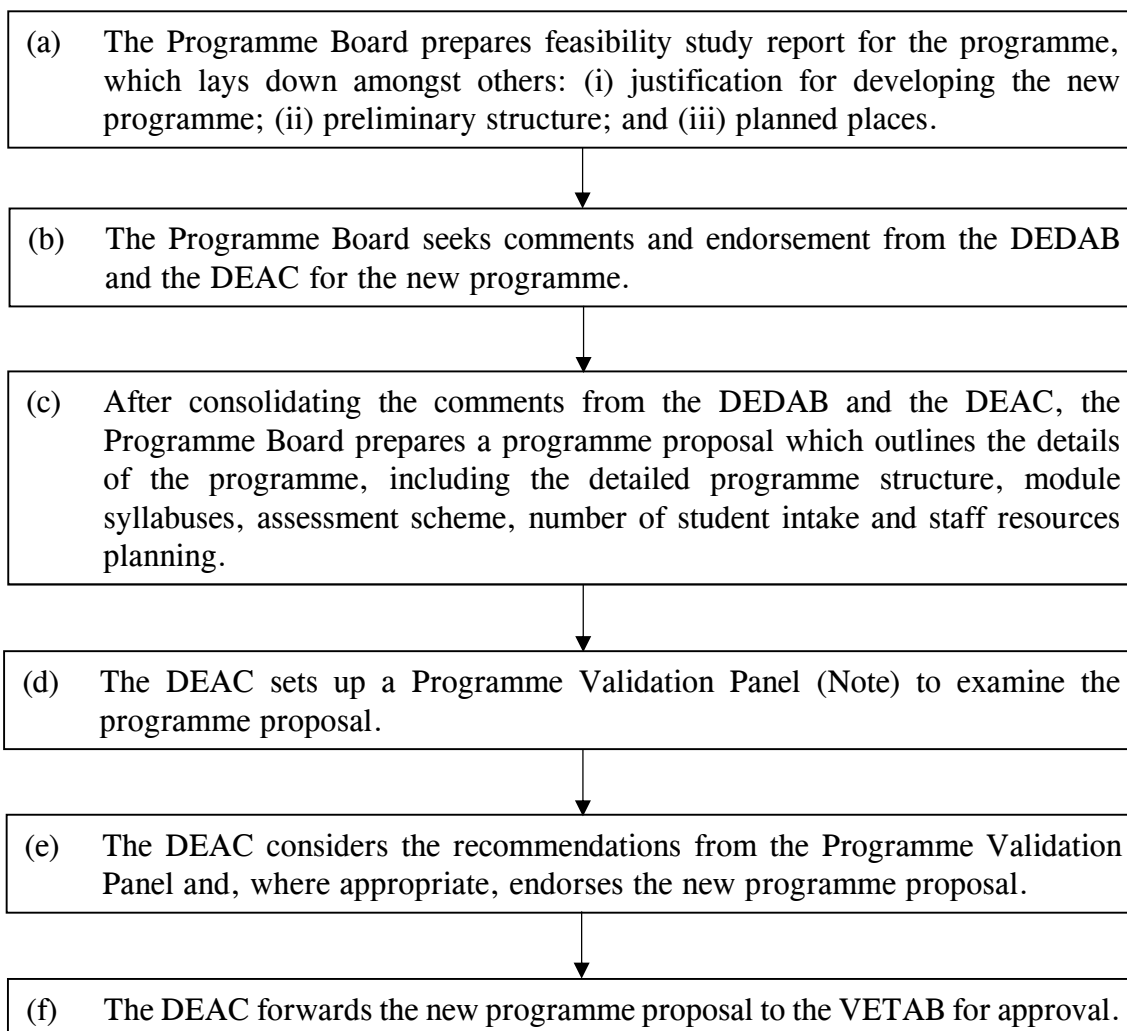|	
(a)	The Programme Board prepares feasibility study report for the programme, which lays down amongst others: (i) justification for developing the new programme; (ii) preliminary structure; and (iii) planned places.

(b)	The Programme Board seeks comments and endorsement from the DEDAB and the DEAC for the new programme.

(c)	After consolidating the comments from the DEDAB and the DEAC, the Programme Board prepares a programme proposal which outlines the details of the programme, including the detailed programme structure, module syllabuses, assessment scheme, number of student intake and staff resources planning.

(d)	The DEAC sets up a Programme Validation Panel (Note) to examine the programme proposal.

(e)	The DEAC considers the recommendations from the Programme Validation Panel and, where appropriate, endorses the new programme proposal.

(f)	The DEAC forwards the new programme proposal to the VETAB for approval.

Source: Audit analysis of HKDI records

Note: The Programme Validation Panel is set up by the DEAC to assess the appropriateness of the proposed programme. The Panel comprises at least five members, including one external member.

Programme completion rate
(2012/13 to 2014/15 intake)

Academic department	2012/13 (%)	2013/14 (%)	2014/15 (%)
DFS	83%	87%	77%
CDM − average − individual programmes	91% ranged from 88% to 92%	85% ranged from 75% to 96%	83% ranged from 80% to 85%
FID − average − individual programmes	84% ranged from 80% to 87%	84% ranged from 80% to 90%	83% ranged from 81% to 87%
PID − average − individual programmes	82% ranged from 71% to 88%	80% ranged from 58% to 90%	75% ranged from 51% to 78%
Overall − average − individual programmes	86% ranged from 71% to 92%	84% ranged from 58% to 96%	80% ranged from 51% to 87%

Source: Audit analysis of HKDI records

Remarks: 1. The programme completion rate is the percentage of students who have fulfilled all the graduation requirements of a programme, and is calculated as follows:

$$\frac{\text{Number of students awarded with HD in an intake year}}{\text{Total number of students enrolled in an intake year}} \times 100\%$$

2. The programme completion rates of 2013/14 and 2014/15 were not the final figures as students were allowed to complete the programme within the maximum period of five academic years. Therefore, the completion rates for 2013/14 and 2014/15 may increase in the next few years.

Employment rate of graduates
(2014 to 2016)

Academic department	2014 Graduates (%)	2015 Graduates (%)	2016 Graduates (%)
DFS	73%	67%	75%
CDM − average − individual programmes	87% ranged from 78% to 96%	85% ranged from 77% to 89%	88% ranged from 78% to 95%
FID − average − individual programmes	74% ranged from 61% to 84%	85% ranged from 75% to 90%	84% ranged from 80% to 90%
PID − average − individual programmes	91% ranged from 83% to 100%	82% ranged from 70% to 100%	86% ranged from 82% to 100%
Overall − average − individual programmes	84% ranged from 61% to 100%	84% ranged from 67% to 100%	86% ranged from 75% to 100%

Source: Audit analysis of HKDI records

Remarks: The employment rate was calculated by dividing the number of graduates who were employed by the sum of the number of graduates who were employed and the number of graduates who were seeking employment.

Terms of Reference of the VTC Standing Committee

(a)   To discharge the functions of the Council and to act on its behalf on all matters requiring policy and executive decisions when the Council is not in session, except those items reserved for the full Council.

(b)   To report to the Council at its next regular meeting on all the decisions taken by the Standing Committee.

(c)   To give initial consideration to any strategic planning and development of the Council, formulation of proposals, review of major policies and making recommendations to the Council.

(d)   To keep under review, on behalf of the Council, the conduct of Council business.

(e)   To advise the Council on any matters referred to it by the Council or any committees or boards of the Council.

(f)   To approve new or revised fees and charges with an estimated annual income up to $50,000,000.

(g)   To approve tenders and to appoint consultants at value up to $50,000,000.

(h)   To accept donations.

(i)   To accept grants for specific educational and training projects.

(j)   To approve the creation of and appointments to directorate ranks/posts below A3 pay point, including extension of service beyond the normal retirement age.

(k)   To determine disciplinary penalties to be imposed on directorate staff below A3 pay point and to approve removal of such staff.

(l)   To decide on appeal against disciplinary actions from staff on or above pay point B34.

The members of the VTC Standing Committee are appointed by the VTC Council. The Committee comprises up to ten VTC Council members (including the Council Chairman, Deputy Council Chairmen, the Executive Director of the VTC, Chairmen of the functional committees set up under the Council and other Council members) and one elected staff member of the VTC. Not more than three external members may be co-opted as Advisors to the Committee as and when required.

Source: VTC records

Terms of Reference of the VTC Estates Committee

(a)   To formulate policy proposals on the Council's premises and related capital projects for the consideration of the Council and the Standing Committee.

(b)   To advise the Council and the Standing Committee on all matters relating to the purchase, lease, erection, alteration and maintenance of buildings and to the acquisition of land for building new campuses and centres.

(c)   To advise the Council and the Standing Committee on the administration of contracts for building projects including the appointment of architectural and engineering consultants at costs with the financial limits prescribed in the Financial Rules (up to $10,000,000).

(d)   To examine and approve sketch designs and estimates of building costs.

(e)   To award works tenders within the financial limit prescribed in the Financial Rules (value up to $10,000,000, but unanimous agreement of members of the Committee is required for tenders of an amount over $2,000,000).

(f)   To examine works tenders for submission to the Standing Committee or the Council for approval.

(g)   To set up any sub-committees it considers necessary.

The members of the VTC Estates Committee are appointed by the VTC Council. The Committee comprises six to ten members, at least two-thirds of which must be VTC Council members. Membership includes the Director of Architectural Services of the Government or his/her representative, and one elected staff member of the VTC.

Source: VTC records

**Terms of Reference of the Steering Committee
for the TKL Campus development project**

(a)   To steer and oversee the design and construction of the new campuses for the HKDI and IVE(LWL).

(b)   To advise on design optimisation and cost containment options.

(c)   To monitor progress and oversee timely project delivery.

(d)   To monitor project budget management and devise contingency plan for over budget of construction costs.

(e)   To advise on any other issues that may arise in the course of the construction project.

(f)   To report regularly to the VTC Estates Committee.

The Steering Committee was set up under the Estates Committee to steer, oversee and monitor the progress of the project. The membership of the Committee comprised a member of the VTC Estates Committee, an external member, the Executive Director of the VTC and five staff members of the VTC.

Source: VTC records

Appendix K

Acronyms and abbreviations

ArchSD	Architectural Services Department
Audit	Audit Commission
BD	Buildings Department
CCG	Client Consultants Group
CDM	Communication Design and Digital Media
CEC	Campus Executive Committee
CENO	Corporate Environmental Office
CSP	Computer service provider
DEAC	Design Discipline Academic Committee
DEDAB	Design Discipline Advisory Board
DEQAC	Design Discipline Quality Assurance Committee
DFS	Design Foundation Studies
DIAB	Design Institute Advisory Board
EDB	Education Bureau
EVA	Emergency vehicle access
FC	Finance Committee
FID	Fashion and Image Design
HD	Higher Diploma
HKDI	Hong Kong Design Institute
HRD	Human Resources Division
IA	Industrial attachment
IVE	Hong Kong Institute of Vocational Education
IVE(LWL)	Hong Kong Institute of Vocational Education (Lee Wai Lee)
LegCo	Legislative Council
MAA	Memorandum of Administrative Arrangement
m^2	Square metres
PID	Product and Interior Design
RC	Reinforced concrete
TKL Campus	Tiu Keng Leng Campus
VETAB	Vocational Education and Training Academic Board
VTC	Vocational Training Council