Project Overview	
Project Title (in English): The Establishment of a VPET repository for collection of materials relating to Vocational and Professional Education and Training in Hong Kong	Project Title (in Chinese): 建立有關香港「職業專才教育」的資料庫

Executive Summary

Vocational and Professional Education and Training (VPET) is one of the strategic components in Hong Kong's education system. As written by the Secretary of Education,

"… *vocational education … plays an indispensable role in nurturing a new generation of talents for the industries and facilitating the long-term development of Hong Kong's economy.*"

In the 2016 Policy Address, the Chief Executive has announced that recommendations made by the Task Force on Promotion of Vocational Education are all accepted by the HKSAR Government. As VPET is gaining its importance, it is expected that the amount of research and studies on VPET will increase tremendously in the years to come. Unfortunately, VPET practitioners and institutes perform their studies in a rather isolated manner and their research outputs are scattered.

This project aims to develop a web-based electronic repository of VPET materials and research outcomes. Four major aspects are addressed by the repository:

(1) The repository archives the research output of local VPET practitioners and institutes. The repository is a one-stop platform that allows local VPET practitioners to search for VPET bibliographies with particular reference to the local environment and education system.

(2) The repository archives various resources and tools that assist VPET practitioners to build high quality training packages efficiently and to conduct quality survey and researches on VPET.

(3) A VPET Subject Guide organized and cross-referenced according to a set of Thematic Categorization Indices will be compiled. The Subject Guide serves as a reference handbook with which VPET practitioners can retrieve related VPET bibliographies and other materials in an organized way using a particular category or keyword term as an entry point.

(4) The repository encourages sharing and collaboration among VPET practitioners by allowing them to upload their research outcomes or other VPET materials.

The VPET repository and the associated tools will be an indispensable tool for local VPET practitioners and government officials to consolidate an overall picture on the latest trends and development in Hong Kong's VPET, to conduct VPET-related researches effectively, to develop curriculum that really fits the needs of the community, and to steer VPET policy and subsequent tactics and actions.

Problems Identified

HKSAR Government's Strategic Policy on Vocational and Professional Education and Training (VPET)

2014 Policy Address

In the 2014 Policy Address, the Chief Executive highlighted that "*mainstream education is not a straightjacket that fits all young people as everyone has his or her own interests and abilities. The government should re-establish the positioning of vocational education in our education system and guide the younger generation in choosing their career*". To this end, the Task Force on Promotion of Vocational Education ("Task Force") was established in June 2014 with a view to mapping out a strategy and concrete proposals to raise public awareness of vocational education and recognition of its value. The Task Force submitted a report to the Education Bureau in July 2015. [1]

Recommendations made by the Task Force

In the report, the Task Force has recommended a three-pronged strategy to promote VPET covering the following:

- **Strategy 1: Rebranding VET** – The term "Vocational Education and Training" (VET) is rebranded as "Vocational and Professional Education and Training" (VPET). VPET covers programmes up to degree level with a high percentage of curriculums consisting of specialised contents in vocational skills or professional knowledge.

- **Strategy 2: Strengthening promotion** – There are 6 categories of recommendations under this strategy to elevate the professional image of VPET and to strengthen collaborations between industries and VPET providers.

- **Strategy 3: Sustaining efforts** – The report urges government officials to seize every opportunity to promote and support VPET. It also recommends the Government to conduct tracking surveys to keep track of any changes in attitude towards VPET among the community and different stakeholders.

As stated in the press release [2] upon receiving the Task Force's report, the Secretary for Education stated that "*… vocational education … plays an indispensable role in nurturing a new generation of talents for the industries and facilitating the long-term development of Hong Kong's economy*."

2016 Policy Address

In the 2016 Policy Address [3], the Chief Executive has accepted all the recommendations in the report from the Task Force and has expressed that the Government will actively consider how to implement the recommendations. As announced in the 2016 Policy Address, the Government will earmark a site in the urban district to develop a Vocational Training Council (VTC) campus with adequate capacity and state-of-the-art facilities.

All the above has demonstrated the Government's determination of adopting VPET as an indispensable and strategic component in Hong Kong's education system.

The Vocational Training Council (VTC)

Being the major VPET provider in Hong Kong, the VTC has been actively promoting the value of VPET among different stakeholders including parents, school principals, teachers and the general public in the community. VTC continues to play the leading role in VPET in Hong Kong with a strategic mission to act in concert with the Government's policy.

The Need for Research Support on VPET

The fact that VPET becomes an important and indispensable component in Hong Kong's education system necessitates a global planning and promotion to advocate the acceptance of VPET among the industry and the general public.

As VPET is gaining its importance and acceptance, it is expected that the amount of research and studies on VPET will increase tremendously in the years to come. Such studies will be essential references for the Government to steer its VPET policy and for institutes to develop VPET curriculum that really fits the needs of students and Hong Kong's economy.

Isolated VPET research and study in Hong Kong

Unfortunately, there is no coordinated and systematic researches and surveys on VPET in Hong Kong so far. VPET practitioners and institutes perform their studies in a rather isolated manner and their research outputs are scattered around different conferences, journals, and other publications. Some research outputs even appear in overseas media rather than being published locally in Hong Kong. The amount of researches and surveys conducted, the focus of such studies, the impact of such studies to VPET in Hong Kong, and the participants who are actively conducting VPET studies are not very clear.

The need for consolidated VPET bibliography

In view of the importance of VPET study and to remedy the undesired situation of scattered and isolated research work described above, it is essential to develop a database that archives the research output of local VPET practitioners and institutes. The database will be an indispensable tool for VPET practitioners to conduct quality VPET studies by referencing or augmenting other's work so that they can make essential contribution to local VPET in the most effective way. Besides, the database will also provide valuable information to the Government for their proper evaluation on the current situation and the needs of the VPET community, and for their steering on VPET policy and actions hence after.

VPET Tools and Resources

Apart from the researches and policies, another dimension on VPET is the development of teaching and learning packages. Unlike the traditional classroom-based curriculum, VPET is unique in the way that practical skills and field experience are of the utmost importance to students.

It is also essential for the teaching and learning packages being brought up-to-update to ensure that the latest skills and knowledge required by the community and industry are incorporated. Developing and updating teaching and learning packages consume a tremendous amount of time and

effort, as reflected by experienced VPET practitioners.

In fact, VPET practitioners are now incorporating the latest technological advancements, such as virtual and augmented reality, mobile and smart devices, video streaming, social media, etc., into their teaching and learning packages, with an attempt to arouse the interests of students and to make learning more intuitive and effective. In the last few years, quite some resources and tools have been developed that allow VPET practitioners to build their teaching and learning packages that are incorporated with those technological advancements. Some examples are:

- Animato – a tool for creating video-based lessons and presentations [5]
- Planboard – a tool for lesson planning and schedule maintenance [6]
- Quizlet – a tool for creating online study sets [7]
- Socrative – a tool for real-time assessment and tracking of student learning activities [8]

In general, those tools have no presumption for the users to be in possession of sophisticated IT knowledge and skills. Such tools are indispensable for VPET practitioners to build their teaching and learning packages without the painstaking consumption of huge amount of time. Unfortunately, VPET practitioners are not quite familiar with such software tools. Even worse is that those tools are of varying quality and some of them may not be suitable in Hong Kong's local environment.

Another mission of the proposed project is thus to compile a repository of high quality resources and tools valuable to local VPET practitioners, and to advocate the use of such tools to elevate the quality of teaching and learning packages in the VPET community. Hence after, VPET practitioners can spend more attention and effort to focus on teaching and coaching their students for practical skills and knowledge.

The Proposed VPET Repository

The diagram on the next page shows the proposed VPET repository which contains seven components. These components are described in detail below.

Thematic VPET Repository

The core components of the Thematic VPET Repository includes: (A) the Thematic Categorization Indices, (B) the VPET Bibliography Database, and (C) the VPET Resources and Tools Bank. The significance, role and functionalities of the components are described below.
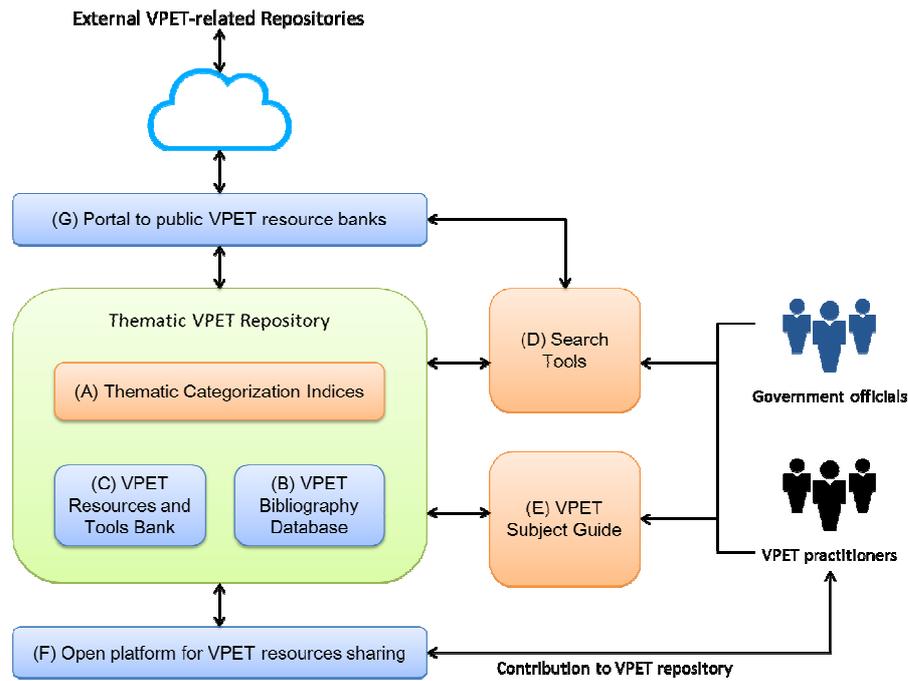
Figure 1. Components of the proposed Thematic VPET Repository

Thematic Categorization Indices (component A)

VPET (or named differently overseas such as Technical and Vocational Education and Training etc.) is an indispensable component in contemporary education. Many countries, such as German, Japan, and Singapore, have spent tremendous efforts in establishing VPET and advocating the acceptance of VPET among community. Because of variations in culture and government policies, understanding and focus of VPET among different countries and cities are diversified. In other words, the same terminology may have different implicit meanings and understandings, and may address different levels of importance and sophistication in different areas [4].

The project team will conduct a survey on VPET-related terminologies and to assess their relevance to VPET in Hong Kong. After that, a list of themes, categories, and terminologies will be compiled accordingly. The list will serve as an important cue to lead VPET practitioners on their VPET curriculum design, researches and policy settings. The list will be published openly for VPET practitioners to use.

The Thematic Categorization Indices will also serve as the basis for the VPET Subject Guide (see component E below).

VPET Bibliography Database (component B)

The project team will perform a survey on research outcomes done by local VPET practitioners, in form of published papers in conferences and journals, surveys, reports and books. Such publications will be consolidated and archived in the database for access by local VPET practitioners. Copyright clearance and authorization from publishers and authors will be sought.

The database will be an essential tool for local VPET practitioners to perform literature research without spending a tremendous amount of time on various or even unknown sources. The database

will also help researchers and policy setters to devise a global view on VPET in Hong Kong.

VPET Resources and Tools Bank (component C)

The project team will perform a survey and evaluation of high quality resources and tools with particular relevance and usage to local VPET practitioners. The resources and tools will be archived and made available for public access. Such resources and tools will assist VPET practitioners to build high quality training packages and conduct survey and researches on VPET topics effectively, without the need to spend tremendous effort in developing the basic building blocks. Instead, VPET practitioners can focus on the core training contents. Description and training guides on the tools will be produced to help VPET practitioners to grasp the skills of using the tools quickly.

Search Tools (component D)

The project team will develop search tools that allow VPET practitioners to search the materials in the repository. When performing a search, a VPET practitioner can use his/her own keywords or simply make the search by browsing through the Thematic Categorization Indices. The former provides flexibility to the users while the latter offers a quick entry point for speedy retrieval of materials. The search tools offer extensive capability and allow materials in the entire repository and external resources to be retrieved (see also component G below).

VPET Subject Guide (component E)

The project team will develop a VPET Subject Guide using the Thematic Categorization Indices (component A) as the skeletal framework, augmented with the followings:

- The VPET Subject Guide is organized and cross-referenced according to the ontology of the categorization indices (component A). VPET practitioners are able to obtain all relevant information using a particular VPET terminology as an entry point. As an example, a VPET practitioner looking at "Apprenticeship" will also be provided with references to materials of "Industrial Attachment" (IA), "Andragogy", IA support schemes available in Hong Kong, curriculum with apprenticeship, among others. In other words, the Subject Guide provides not only textual explanations of VPET terminologies, but also generates dynamically an illustrative VPET vision with regard to the terminologies being investigated under the context of Hong Kong's local VPET and education system.

- The contents in the VPET Subject Guide are linked to the Thematic VPET Repository to ensure that (1) the enormous volume of materials in the repository are accessible to users of the Subject Guide, (2) users of the Subject Guide can have the most updated VPET materials available at their fingertips through dynamic linking with the repository, which are updated continuously, and (3) usage patterns of the Subject Guide will be collected anonymously in the repository to assist analysis of the latest trends and topics that VPET practitioners concern most.

- The VPET Subject Guide will be offered as an e-platform to ensure that the most updated materials as available in the Thematic VPET Repository are accessible from the Subject Guide.

- A hyperlink-enriched PDF version of the VPET Subject Guide will also be provided to ensure widespread accessibility and usage. The PDF will be updated from time to time to ensure that the most updated VPET materials are referenced.

Open Platform for VPET Resources Sharing (component F)

To encourage sharing among VPET practitioners, the project team will develop a platform that allows local VPET practitioners to upload their research outcomes in form of research publications, survey and investigation reports to the repository. A practitioner can make references to the Thematic Categorization Indices for the materials uploaded to ensure that other VPET practitioners can locate the uploaded work precisely with the correct scope and context. To ensure persistent high quality in the repository, the uploaded materials will be screened before being released in the repository for public access.

Portal to Public VPET Resource Banks (component G)

The proposed platform provides a portal so that a VPET practitioner can expand his/her search for bibliography and resources to other VPET resource banks worldwide. Because of the enormous amount of VPET materials available worldwide and their varying levels of relevancy to Hong Kong, the proposed Thematic VPET Repository will in principle store only those materials that are of particular relevance to the local environment. The portal however provides a window for local VPET practitioners to expand their search of VPET resources all over the entire Internet.

Sharing Mechanism

As the project aims to facilitate the development and promotion of VPET and to encourage collaborations among VPET practitioners, the entire VPET Repository and the associated tools will be open for public access for free. The collected resources will also be transferred to the VTC Library for education and research purposes. Through the mutual linkages between library systems among local institutes, the repository and VPET resources will gain widespread usage by the local VPET community. Mechanisms for sharing the project deliverables are further elaborated in Part E.

References

[1]   "Report of the Task Force on Promotion of Vocational Education"
       Available Online: http://www.edb.gov.hk/en/edu-system/other-edu-training/vocational-other-
       edu-program/promotion-vet.html

[2]   Press Release - "Task Force on Promotion of Vocational Education submits report"
       Available Online: http://www.info.gov.hk/gia/general/201507/06/P201507060595.htm
       6 July 2015, HKSAR Government

[3]   "2016 Policy Address", Available Online: http://www.policyaddress.gov.hk/2016/eng

[4]   TVETipedia Glossary, UNESCO-UNEVOC Centre for Technical and Vocational Education and Training
       Online: http://www.unevoc.unesco.org/go.php?q=TVETipedia+Glossary+A-Z&char=T#T

[5]   Animoto – Creating video-based lessons or presentations

Online: https://animoto.com/

[6] Planboard – Lesson planning and schedule maintenance
Online: https://www.planboardapp.com/

[7] Quizlet – Creating study sets online
Online: https://quizlet.com/

[8] Socrative – Real-time assessment and tracking of student learning
Online: http://www.socrative.com

Part E	Project Objectives and Deliverables

VTC is the leading VPET provider in Hong Kong and is in possession of expertise and experience with a high level of sophistication among different VPET areas. VTC also has extensive linkages to the industry for offering VPET programmes. As such, accomplishments for the project objectives below are guaranteed.

Measurable Objectives	How it can be achieved
1. To identify and define VPET themes and categories that are of particular relevance and importance to local VPET in Hong Kong. The list will serve as an important cue to lead VPET practitioners on their curriculum design and VPET-related researches.	● The themes and categories will be generated by ■ (1) reviewing VPET programmes and curriculum offered in VTC and other local institutes, ■ (2) consulting experienced VPET practitioners both within VTC and other institutes, ■ (3) consulting corporations in the industry who are active supporters of VPET, and ■ (4) reviewing literatures and survey on VPET. ● (see deliverable 1 below)
2. To compile a VPET Subject Guide under the context of Hong Kong's VPET. The Subject Guide servers as a reference handbook with which VPET practitioners can understand VPET terminologies and retrieve relevant bibliographies and other materials under Hong Kong's context.	● The subject guide will be generated by ■ (1) review existing VPET-related glossary such as [4] and make necessary amendments for Hong Kong's local environment, ■ (2) perform a literature survey on VPET publications both local and overseas, and make necessary amendments for Hong Kong's local environment, and ■ (3) consulting experienced VPET practitioners both within VTC and other institutes. ● (see deliverable 6 below)

3.	To construct a categorized repository of (i) bibliography on VPET researches and (ii) various resources and tools to facilitate VPET practitioners to develop their curriculum and training packages effectively and to perform studies on pedagogy on VPET curriculum delivery.	• The project team will conduct an exhaustive survey on VPET bibliography among repositories of local institutes and research organizations, conferences, journals and publishers, and will compile a list of VPET bibliography relevant to Hong Kong. The project team will then negotiate with the publishers and owners for authorization to post the bibliography on the proposed Thematic VPET repository. • The project team will conduct an exhaustive survey on free VPET resources and tools. The resources and tools will be evaluated for their quality, sophistication and suitability to Hong Kong VPET. Appropriate tools and resources will be selected and included in the proposed repository. • (see deliverables 1, 2, 3 and 4 below)
4.	To provide a one-stop platform to allow VPET practitioners to access VPET materials both locally in Hong Kong and other online resource banks worldwide, without the need to spend huge amount of time for searching multiple platforms.	• The proposed Thematic VPET Repository contains a search tool for users to enquire VPET materials relevant to the users' search criteria. The tool not only searches the materials in the repository itself but also connects to the portal for searching relevant materials from public VPET resource banks worldwide. • (see deliverables 4, 5, 6 and 8 below)
5.	To encourage and support VPET practitioners in Hong Kong to mutually share their views, research outputs and other VPET resources, in an attempt to promote collaborations among institutes and among VPET practitioners.	• The proposed Thematic VPET Repository contains an open platform for VPET practitioners to upload and share their VPET outputs. • (see deliverable 7 below)

6.	To support government officials to conduct survey and study to understand the latest situation of VPET in Hong Kong.	● Government officials can use the proposed Thematic VPET Repository to review research findings among VPET providers. ● (see deliverables 4, 5, 6 and 8 below)

Project Deliverables

	Deliverables	Sharing mechanism
1.	Thematic Categorization Indices – A list of VPET themes and categories that are of particular relevance and importance to local VPET in Hong Kong. (component A in Figure 1)	● The list will be publicly available through (1) VTC websites, (2) the proposed Thematic VPET Repository website, (3) EDB website, and (4) CSPE website. ● The list will be announced and promoted in the launching ceremony of the Thematic VPET Repository, the training workshops, and through EDB websites. ● (See the "Publicity Plan")
2.	A bibliography database that stores VPET research outputs (in form of journal and conference papers / surveys / reports / books etc.) produced by local institutes and scholars. (component B in Figure 1)	● The bibliography database will be publicly available through the Thematic VPET Repository website, which is publicly accessible. ● The database will be announced and promoted in the launching ceremony of the Thematic VPET Repository, the training workshops, and through EDB websites. ● (See the "Publicity Plan")
3.	A collection of free resources and tools that facilitate VPET practitioners to build their customized packages for effective delivery of VPET curriculum or to perform survey and studies on VPET pedagogy. (component C in Figure 1)	● The collection will be publicly available through the Thematic VPET Repository website, which is publicly accessible. ● The collection will be announced and promoted in the launching ceremony of the Thematic VPET Repository, the training workshops, and through EDB websites. ● (See the "Publicity Plan")
4.	The Thematic VPET Repository which is an integrated platform composed of	● The repository will be delivered as a publicly accessible website.

	deliverables (1) – (3) above.	- A link to the website will be added to (1) VTC websites, (2) EDB website, and (3) CSPE website. - Links to the repository will be added to the information and research support websites of other local institutes and research organizations. - The repository will be announced and promoted in the launching ceremony of the Thematic VPET Repository, the training workshops, and through EDB websites. (See the "Publicity Plan")
5.	A search tool for VPET practitioners to search for relevant bibliography, resources and tools based on the themes and categories (see deliverable 1) both from the proposed repository (see deliverable 4) and from other online resource banks worldwide (see deliverable 8). (component D in Figure 1)	- The search tool will be publicly available through the Thematic VPET Repository website, which is publicly accessible. - The search tool will be announced and promoted in the launching ceremony of the Thematic VPET Repository, the training workshops, and through EDB websites. (See the "Publicity Plan")
6.	A Subject Guide on VPET will be compiled. The Subject Guide is organized and cross-referenced according to the Thematic Categorization Indices. The Subject Guide provides illustration and explanations of VPET terminologies under the context of Hong Kong's local education system. The Subject Guide serves as a reference handbook with which VPET practitioners can retrieve related VPET bibliographies and other materials in an organized way using a particular category or keyword term as an entry point. (component E in Figure 1)	- The Subject Guide will appear as (1) an e-platform for interactive access, and (2) a hyperlink-enriched PDF version. - The e-platform will be publicly accessible through the Thematic VPET Repository website. - The PDF version will be circulated among VPET practitioners via emails and other electronic means. - The Subject Guide will be announced and promoted in the launching ceremony of the Thematic VPET Repository, the training workshops, and through EDB websites.

7.	An open platform in form of a website to allow local VPET practitioners to upload their VPET outputs for sharing with others in the VPET community. (component F in Figure 1)	• The open platform will be publicly accessible through the Thematic VPET Repository website. • The platform will be announced and promoted in the launching ceremony of the Thematic VPET Repository, the training workshops, and through EDB websites. • (See the "Publicity Plan")
8.	A portal that offers a one-stop platform to allow VPET practitioners to search for VPET materials both locally in Hong Kong and other online resource banks worldwide, based on the list of VPET themes and categories. (component G in Figure 1)	• The portal will be publicly available through the Thematic VPET Repository website, which is publicly accessible. • The portal will be announced and promoted in the launching ceremony of the Thematic VPET Repository, the training workshops, and through EDB websites. • (See the "Publicity Plan")
9.	4 training workshops with 35 participants each to teach VPET practitioners skills for using the proposed VPET repository and its associated tools.	• Details of the training workshops, including schedule and enrolment, will be announced through (1) VTC websites, (2) the proposed Thematic VPET Repository website, and (3) the launching ceremony. • Invitations will be sent to local VPET practitioners and institutes in printed form and via email.
10.	Self-study training packages in form of online tutorials and demonstration video to teach users how to use the Thematic VPET Repository.	• The training packages will be publicly available through (1) VTC websites, and (2) the proposed Thematic VPET Repository website.

| 11. | A launching ceremony to introduce the Thematic VPET Repository to VPET practitioners, local researchers, government officials and the general community | • Invitations to the launching ceremony will be sent to (1) local VPET practitioners, (2) institutes providing VPET or similar training programmes, (3) government officials working on VPET.
• Corporations in the local industry who are supportive and participative in VPET will be invited.
• Mass media will be invited with the aim to arouse VPET awareness among the general public and community.
• The launching ceremony will be video-captured for sharing among VPET practitioners for promotion of the repository. |

As the primary objective of the entire project is to encourage and facilitate VPET in Hong Kong, most, if not all, information collected or generated in the project can be released to the general public. Links to access such information can be published openly too.

Upon the agreement by the EDB, information that may be uploaded to EDB websites include the followings:

	Associated Project Deliverables	Information to be uploaded to EDB websites
1.	VPET Thematic Categorization Indices (deliverable 1)	• Posted as a cross-reference enabled PDF file • A link to the VPET repository official website for accessing the indices
2.	VPET Subject Guide (deliverable 6)	• Posted as a cross-reference enabled PDF file • A link to the VPET repository official website for accessing the Subject Guide
3.	Thematic VPET Repository and search tool (deliverables 2, 3, 4 & 5)	• A link to the VPET repository official website for accessing the repository and tool
4.	Open platform for resources upload and sharing (deliverable 7)	• A link to the VPET repository official website for accessing the platform
	Associated Project Deliverables	Information to be uploaded to EDB websites
5.	Portal to public VPET resource banks	• A link to the VPET repository official website for

	(deliverable 8)	accessing the portal
6.	Training workshops for using the VPET repository and related tools (deliverable 9)	● Schedule and other enrolment details can be posted ● Video capture, handouts and practical exercises ● A link to the VPET repository official website for accessing the workshop materials
7.	Self-study training packages (deliverable 10)	● Training booklets, exercises and associated materials in form of a single compressed archive ● A link to the VPET repository official website for accessing the training packages
8.	Launching ceremony (deliverable 11)	● Schedule and other enrolment details can be posted ● Video capture of the launching ceremony ● Press release and media reports on the launching ceremony ● A link to the VPET repository official website for accessing information and materials related to the launching ceremony

Beneficiaries	
Expected type and number of beneficiaries of the project	● VPET practitioners (teachers / instructors / programme leaders / curriculum designers) 　■ expected to have 500 enrolled users 　■ expected to have 200 active users ● Students engaged in VPET programmes ● Local institutes offering VPET programmes and curriculum ● Government officials working on VPET projects and promotions

VPET practitioners

The Vocational Training Council is the largest organization offering VPET in Hong Kong. It has more than 2,500 full time teaching staff servicing various self-financed VPET programmes. The teaching staffs are eligible to access the resources in the Thematic VPET Repository. It is expected that 500 users (both within and outside the VTC) will be enrolled. Among these 500 enrolled users, 200 will be active users. As the repository is open for public access, local VPET practitioners in other institutes can all make use of the repository to improve their programmes and training materials.

Students engaged in VPET programmes

In the academic year 2015–2016, the number of students engaged in self-financing VPET degree education in the Vocational Training Council reached over 2,000 while the number students enrolled in self-financing higher diploma programmes is about 6,000. During the initial stage, it is anticipated that about 25% of these students will become active users of the repository. The number of users would increase gradually after the launch of the repository, accommodating VPET students outside the Vocational Training Council. By having the Thematic VPET Repository and the associated tools, VPET practitioners and institutes can devise programmes and curriculum that truly reflect the needs of students and the community. With the repository, VPET practitioners can perform studies to develop pedagogies that are tailored to vocational training and best suit the way students in Hong Kong learn and practice. In fact, students engaged in subvented and sub-degree programmes can also be benefited.

Local Institutes and Government officials.

As the repository is publicly accessible, VPET practitioners and post-secondary institutes can make use of the resources in the repository to conduct VPET-related researches and surveys in Hong Kong, in an attempt to develop programmes and curriculum that meet the real needs of students and the industry in Hong Kong. VPET practitioners in particular can employ the tools in the repository to develop high quality training materials. Mutual sharing of VPET research outcomes is advocated through the sharing mechanism in the platform.

Government officials can make references to the VPET Subject Guide and the bibliography reserve in the repository to grasp and learn the latest development and unique characteristics of VPET in Hong Kong. The Thematic VPET Repository offers a one-stop platform for government officials to get in touch with the front-end VPET practitioners in Hong Kong.

Implementation Schedule*)*		
Estimated start date of the project (month/year)		9 / 2016
Estimated end date of the project (month/year)		8 / 2018
Project duration (months)		24 months
Month	**Key milestones**	
	In terms of project activities and deliverables	**In terms of monitoring and evaluation**
	Please refer to the project Gantt chart.	
1-3 Sep 2016 to Nov 2016	• **Task**: Compile a list of VPET themes and categories that are of particular importance and relevance to Hong Kong • **Milestone**: Deliverable 1 completed by Dec 2016	
4-5 Dec 2016 to Jan 2017		• Review the list of VPET themes and categories (deliverable 1) by Project Evaluation Team
3-12 Nov 2016 to Aug 2017	Two concurrent tasks: • **Task**: Collect VPET bibliography and archive them into database • **Task**: Collect and evaluate VPET resources and tools and select those that are particularly useful to local VPET practitioners • **Milestone:** Deliverables 2 & 3 completed by Aug 2017	
13-15 Sep 2017 to Nov 2017		• Review the quality of VPET bibliography database (deliverable 2) and the resources and tools collected (deliverable 3)

10-14 Jun 2017 to Oct 2017	Three concurrent tasks: ● **Task**: Develop the repository by consolidating the bibliography, resources and tools into a web-based e-platform ● **Task**: Develop the thematic search tool ● **Task**: Compile the VPET Subject Guide ● **Milestone**: Deliverables 4, 5 and 6 completed by Nov 2017	
15-16 Oct 2017 to Jan 2018		● Review the consolidated repository and test the search tools ● Review the quality of the VPET Subject Guide
13-17 Sep 2017 to Jan 2018	Two concurrent tasks: ● **Task**: Develop the platform that allows VPET practitioners to upload and share their outcome ● **Task**: Develop the portal to external online VPET resource banks ● **Milestone**: Deliverables 7 and 8 completed by Jan 2018	
18-19 Feb 2018 to Mar 2018		● Perform testing on the integrated Thematic VPET Repository which now includes all desired functionalities, bibliography, and VPET resources and tools
18-23 Feb 2018 to Aug 2018	Three concurrent tasks: ● **Task**: Deliver 4 training workshops ● **Task**: Develop the online training packages ● **Task**: Conduct a launching ceremony ● **Milestones**: Deliverables 9 to 11 completed by Aug 2018	● Conduct a final review on the entire project

Project Gantt Chart

The project Gantt chart is shown below for easy reference of project activities, evaluation steps and project deliverables.
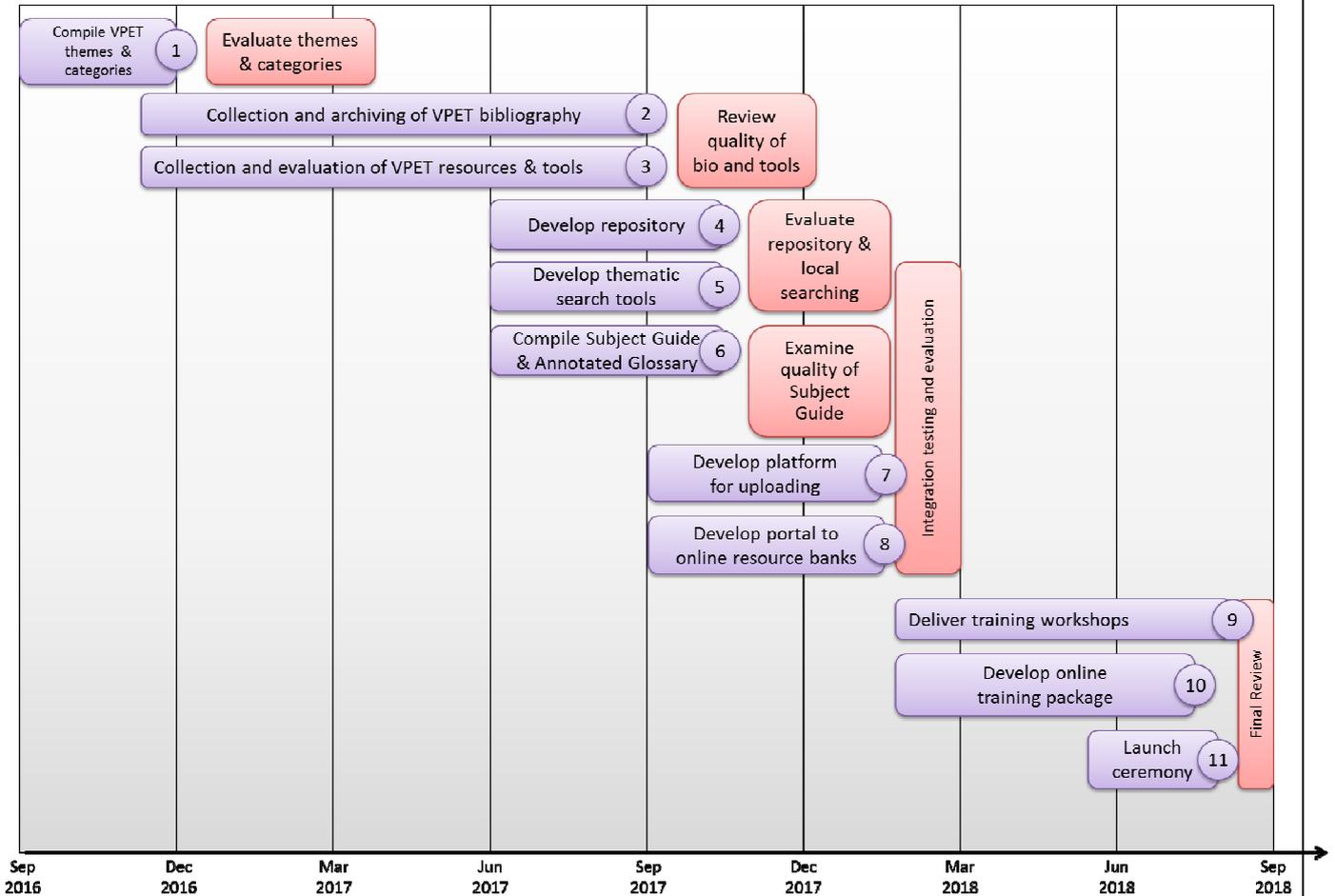
Legends:

Project Tasks and Activities

Monitoring and Evaluation Tasks

(1) Completion of project deliverable. The number refers to the id of an deliverable.

Publicity Plan

Publicity opportunities and events to promote the Thematic VPET Repository and to acknowledge the support of QESS include:

Online Acknowledgement to QESS

1. The websites of the Thematic VPET Repository and associated platforms will explicitly state that the entire platform is developed with the support from QESS.

2. When the list of VPET themes and categories (deliverable 1) are released to VPET practitioners through various channels, the support from QESS will be acknowledged.

3. When VPET practitioners download or access any resources and tools from the repository, they have to read and accept a statement which provides purpose and background information of the project. In the statement, the support from QESS on the project will be acknowledged.

Launching Ceremony

4. A launching ceremony (deliverable 11) to introduce the Thematic VPET Repository will be arranged. CSPE will be invited as a co-organizer. Details follow:

    ■   The launching ceremony will be held in August 2018, in the Auditorium of the Hong Kong Design Institute (rental fee supported as in kind contribution by the VTC).

    ■   Participants include (1) EDB representatives, (2) CSPE representatives, (3) Senior management representatives of the VTC, (4) 100 VPET practitioners from the VTC, (5) 30 VPET practitioners from local institutes, (6) 150 students enrolled in self-financing programmes offered by the VTC, (7) 20 guests from industry and corporations engaged in VPET.

    ■   The launching ceremony will last for 1.5 hours. Agenda items include (1) 15 min speech delivered by EDB representative, (2) 10 min speech delivered by EDB representative, (3) 10 min speech delivered by senior management representative of the VTC, (4) 5 min launching action, (5) 15 min live demonstration, (6) 10 min experience sharing on using the VPET repository in form of video, and (7) 5 min closing remark by VTC representative.

    ■   Mass media, both electronic and printed media, will be invited to encourage further publicity in local public media.

4x Training Workshops

5. During the training workshops (deliverable 9) on using the Thematic VPET Repository, explicit acknowledge will be made to QESS for its support on the project. All handouts and training materials will have the acknowledgement. Details follows:

    ■   The four training workshops will be held in February, April, June and July 2018.

    ■   Each workshop will accommodate 35 participants, making a total of 140 participants for the

four workshops.

- Invitations to enrolment will be made via email to local institutions engaged in self-financing post-secondary programmes and via announcements on EDB and VTC websites.

- Each workshop will last for 4 hours. Contents include (1) 20 min overview on VPET, (2) 20 min hands-on practice in using the VPET Subject Guide, (3) 90 hours hands-on practice in using the Thematic Categorization Repository for local bibliography searching, (4) 20 min hands-on practice in global resource searching with the portal, (5) 60 min hands-on practice in using VPET tools. Two breaks of 15 min each will be provided.

- The workshops will be video-taped and the video will be posted on EDB and VTC websites for public access.

<u>Online Training</u>

6. Training packages (deliverable 10) in form of online tutorials and demonstration video will be provided. The packages will include acknowledgement to QESS for its support on the project. Contents of the training packages include:

- A training booklet to explain the purpose and use of the VPET Subject Guide, augmented with a set of exercises for hands-on practice. Video demonstration to illustrate the steps will be provided.

- A training booklet to explain the use of the Thematic VPET Repository (components A to D in Figure 1) augmented with a set of exercises for hands-on practice. Video demonstration to illustrate the steps will be provided.

- A training booklet to illustrate the use of the portal for searching external VPET resources. Video demonstration to illustrate the steps will be provided.

- Training booklets to illustrate 5 common VPET tools for generating VPET teaching materials and conducting VPET surveys. Video demonstration to illustrate the steps will be provided.

Part F Cash Flow and Budget				

Project Expenditure

	Amount in HK$			
Period	Year 1	Year 2	Year 3	Total
Manpower	799,094	839,046		1,638,140
Equipment / Facilities	86,000			86,000
Services	220,000			220,000
General Expenses		8,600		8,600
Others (e.g. auditor's fee)	7,500	36,790		44,290
Total	1,112,594	884,436		1,997,030

Project Income *(if any, e.g. fees received)*

	Amount in HK$			
Period	Year 1	Year 2	Year 3	Total
Total				

Grant Sought under the Quality Enhancement Support Scheme	1,997,030
Funding from the Applicant	
Funding from Other Sources	
Total Project Value	1,997,030

Post	Duties
Project Officer	As Project Officer (VPET Specialist) ● To perform the scheduled implementation tasks with regard to the collection and categorization of VPET materials ● To design the access mechanism and user interface of the VPET repository and to ensure it is offered to its users in an intuitive and highly usable way
Technician	● To evaluate ready-to-use building blocks/tools for the implementation of the repository and associated tools and platforms ● To provide technical support to the implementation of the repository and associated tools and platforms ● To work with third-party VPET resource banks for resolving technical details in mutual linkup ● To evaluate free VPET tools and to write technical guidelines for using the tools

Project Sustainability

The project expenditure comprises two major components: (1) the development cost for the VPET repository and associated tools and (2) the acquisition and copyright clearance of VPET bibliography.

Once established within the project period, no major change to the software architecture of the VPET repository is expected. The recurrent expenditure for maintaining the server which runs the VPET repository is expected to be low and will be absorbed by the Vocational Training Council.

The acquisition and copyright clearance of VPET bibliography of existing publications (including those released during project period) will be completed within the project period. Further update to the repository after the project period will continuously be confined to those published by local VPET practitioners. It is expected that the initial establishment of the VPET repository during the project period will compile the majority of the cost for acquisition and copyright clearance of VPET bibliography. The financial expenditure in this aspect after the project period will not be high. The cost in this area after the project period will be reduced by (1) negotiating with publishers and authors for reduced cost, (2) publishing only the abstract or a summary in the VPET repository instead of the full version, and (3) publishing only the links to the publications that are archived elsewhere.

The project team will also seek for other financial aids to support the continuous maintenance of the VPET repository after the QESS funding period.