Guidebook of Online Teaching in VTC

1 Introduction

To cope with the latest trend in using technology in education, VTC has adopted the approach of Technology Enhanced Learning (TEL) as an initiative in learning and teaching to enhance student learning experiences. Since 2012, Moodle has been used as a learning management platform in VTC to facilitate e-learning and blended learning. Teachers make use of various Moodle features and activities to conduct online teaching. Despite effort made, some of us may find it difficult to design an online lesson or to utilise the current technology to enhance learning and teaching.

With such a demand, the Centre for Learning and Teaching (CLT) has prepared this guidebook to introduce the instructional design of online teaching as well as present some exemplars for our teachers as reference. We hope it can serve as a quick guide or a kick-start tool for teachers to prepare themselves to teach online.

2 What is Online Teaching?

In 2014, the European Commission introduced the broader term 'digital and online learning' (DOL) to emphasise the two main components of today's 'e-learning'.

Online Learning means: today's prevalent form of distance learning (Demiray and Isman, 2001), imparted mainly via the Internet, incorporating social media and web2.0 services for a collaborative and personalised learning experience, anywhere and at any time via desktop and mobile computing devices.
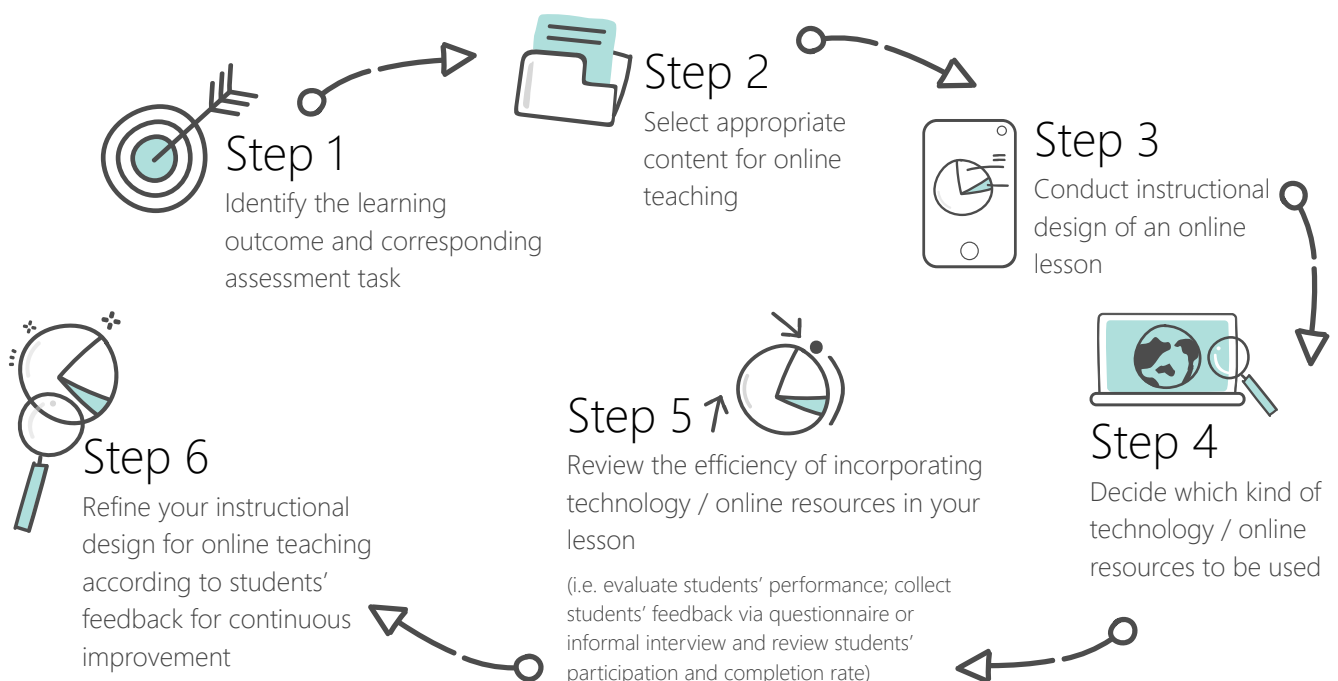
To put it simply, online teaching refers to learning on devices that have a connection to the Internet.

In VTC, we adopt the student-centred approach in learning and teaching, which can also be applied in online teaching. To students, online teaching means flexibility of choice of learning venue, pace and time. It could also increase their learning motivation through a multimedia presentation of learning content as well as facilitate their learning process through extensive learning resources including links, videos, glossaries, online libraries and the like.

3 Preparation of Online Teaching

To start with, teachers may consider the following steps when planning an online lesson:

Step 1
Identify the learning outcome and corresponding assessment task

Step 2
Select appropriate content for online teaching

Step 3
Conduct instructional design of an online lesson

Step 4
Decide which kind of technology / online resources to be used

Step 5
Review the efficiency of incorporating technology / online resources in your lesson

(i.e. evaluate students' performance; collect students' feedback via questionnaire or informal interview and review students' participation and completion rate)

Step 6
Refine your instructional design for online teaching according to students' feedback for continuous improvement

4 Points to Consider for an Online Lesson

1 Identify the learning outcome and corresponding assessment task

2 Select appropriate content for online teaching

3 Conduct instructional design of an online lesson

What learning objective(s) should students achieve and how will they be assessed?

- ☐ Identify Module Intended Learning Outcomes (MiLOs)
- ☐ Check Module Assessment Scheme (MAS) for constructive alignment
- ☐ Define Lesson Intended Learning Outcomes

What kind of learning content are you going to teach online?

- ☐ Attitude
- ☐ Skills
- ☐ Knowledge

What learning and teaching pedagogies are you going to adopt?

- ☐ Active Learning 🔍
- ☐ Blended Learning 🔍
- ☐ Case-based Learning 🔍
- ☐ Computational Thinking 🔍
- ☐ Content and Language Integrated Learning 🔍
- ☐ Game-based Learning 🔍 / Gamification 🔍
- ☐ Micro-learning 🔍
- ☐ Project-based Learning 🔍
- ☐ Self-regulated Learning 🔍

What kind of Teaching and Learning Activities (TLAs) are you going to choose for enriching students' knowledge?

Learning Content Delivery

- ☐ PowerPoint Narration
- ☐ Short Video Tutorial (e.g. 3-6 mins duration)
- ☐ Animation
- ☐ Infographic
- ☐ Read aloud / Speech
- ☐ Case Study
- ☐ Demonstration via Video

Collaborative Activity

- ☐ Collaborative Project
- ☐ Q&A
- ☐ Discussion Forum
- ☐ Brainstorming
- ☐ Mind-mapping
- ☐ Presentation
- ☐ Voting
- ☐ Game
- ☐ Hands-on Training
- ☐ Workplace Exploration

Evaluation

- ☐ Reflective Journals
- ☐ Assignment
- ☐ Assessment (e.g Online Quizzes)
- ☐ Self / Peer Evaluation
- ☐ Project
- ☐ e-Portfolio

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Decide which kind of technology / online resources are used

What kind of Moodle activities or technology are you going to use to conduct the above TLAs?

Moodle (Learning Management Platform)

- ☐ **Assignment** (Is it for communication tasks, collecting learning evidence, providing grades or feedback on students' submission?)
- ☐ **Chat** (Is it for text-based or real-time synchronous discussions?)
- ☐ **Choice** (Is it for asking a single question or offering a selection of possible responses?)
- ☐ **Database** (Is it for creating, sharing, maintaining or searching a collection of entries?)
- ☐ **External tool** (Is it for incorporating content with other websites?)
- ☐ **Feedback** (Is it for creating a custom survey with multiple choice, yes/no or text input?)
- ☐ **Forum** (Is it for enabling discussions which take place for a certain period of time? i.e. allows asynchronous discussions)
- ☐ **Glossary** (Is it for creating a list of definitions, like a dictionary, or collecting resources and information?)
- ☐ **HotPotato** (Is it for distributing interactive learning materials by importing quizzes created with Hot Potatoes?)
- ☐ **Lesson** (Is it for creating a linear set of content pages or instructional activities with a variety of paths or options?)
- ☐ **Quiz** (Is it for creating assessment or self-evaluation? It has 16 types of questions including multiple choice, matching, short-answer and numerical questions.)
- ☐ **SCORM package** (Is it for enabling Sharable Content Object Reference Model (SCORM) or Aviation Industry CBT Committee (AICC) packages to be uploaded as a zip file and added as course content?)
- ☐ **Survey** (Is it for providing a number of verified survey instruments that teachers can use to gather data from students?)
- ☐ **Video Assignment** (Is it for requiring students to submit videos, e.g. procedural demonstration /role-play?)
- ☐ **Wiki** (Is it for creating a collaborative space for students to edit?)
- ☐ **Workshop** (Is it for creating collection, review and peer assessment of students' work?)
- ☐ **Panopto** (Is it for showing your recorded lecture to students?)

Microsoft Teams (Communication Tools)		☐ **Live video lecture** (Is it for live-broadcasting online lecture, or containing a variety of teaching resources?)
Online Videos (OER)		☐ **YouTube** (Is it for delivering procedural training with open online resources?) Highly recommended to use it for video uploading and insert the link to Moodle to incorporate your teaching.
		☐ **Khan Academy** (Is it for delivering content conducted by subject experts?)
Free Education Technology Tools (EdTech Tools)	Classroom Response System & Assessment Application	☐ **Kahoot!** (Is it for creating MC learning games, quizzes, discussion and surveys?
		☐ **Plickers** (Is it for collecting instant feedback and responses?)
		☐ **Mentimeter** (Is it for creating interactive presentation and discussion?)
		☐ **Socrative** (Is it for creating easy quizzes, polls, exit tickets?)
		☐ **Padlet** (Is it for creating collaborative boards, documents, and webpages?
		☐ **Quizlet** (Is it for creating flashcards, games and learning packages?)
	Mind-mapping Application	☐ **Coggle** (Is it for creating collaborative mind-mapping?)
		☐ **Sketchboard** (Is it for creating team creative sketch diagramming on online whiteboard?)
	Video Making	☐ **Explain Everything** (Is it for creating collaborative presentation & video?)
		☐ **Adobe Spark** (Is it for creating easy-to–create video?)
	Animation Making	☐ **Powtoon** (Is it for creating presentation and animation?)
Virtual Reality and Augmented Reality Application (VAR)	Workplace Exploration	☐ **360-degree Panoramic Application** (Is it for creating exploration of the workplace environment, good practice or familiarising with industrial standard?)
	Procedural Training	☐ **VR Head Mounted Display** (Is it for creating one-on-one hands-on procedural training?)
		☐ **AR Tablet Application** (Is it for creating interactive procedural training resources?)

How would you collect students' feedback for refinement of your online teaching?

☐ Student Feedback Questionnaire (SFQ)

☐ Discussion Forum

☐ Assessment (e.g Online Quizzes)

☐ Email

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Exemplars

In VTC, some disciplines have developed various kinds of online learning packages for students to learn with more flexible modes. Some exemplars are shown below for reference. We hope you can get more ideas on developing your own online teaching materials.

* Please contact individual discipline for access to the exemplars.

A mini-MOOC course by Languages Discipline

1. Course information, course structure and the learning outcomes are shown in the introduction video. Students can get a clear picture of what they are going to learn.

2. Pre-test is designed for students to do a warm-up exercise before going through the learning journey.
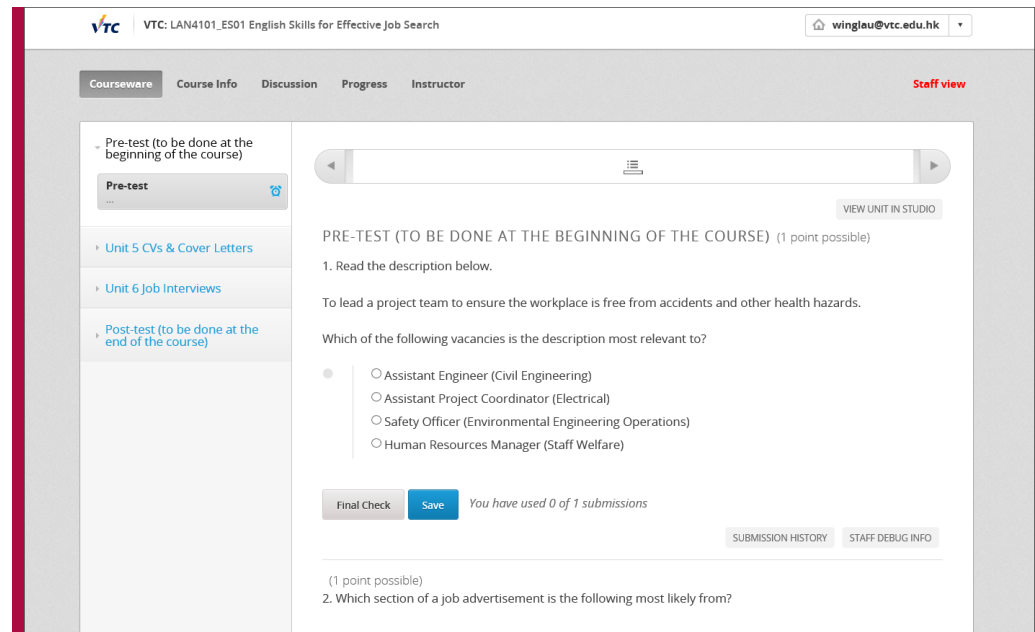
3. The concept of Micro-learning is applied. Split the videos into several segments and keep the duration of each video less than 6 minutes.
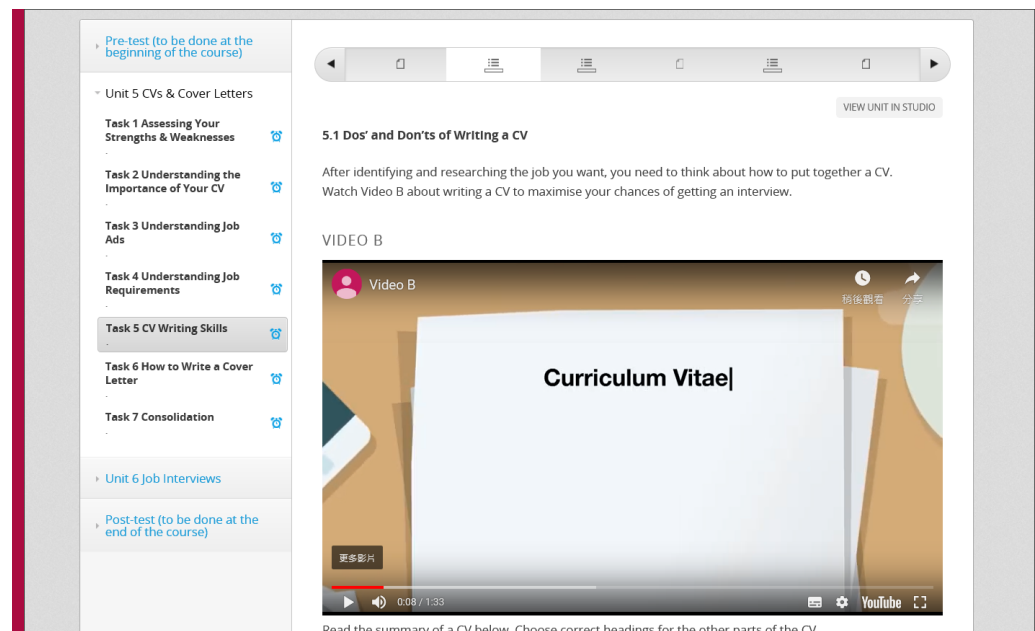
4. Formative assessments tasks are designed for checking students' learning progress.

• Select the answer from the pull down menu

• Write a summary

• Analyse a statement

A Moodle Course by Business Discipline

1. The layout design is clear and readable

2. Illustrate the concepts by bite-size video with subtitles
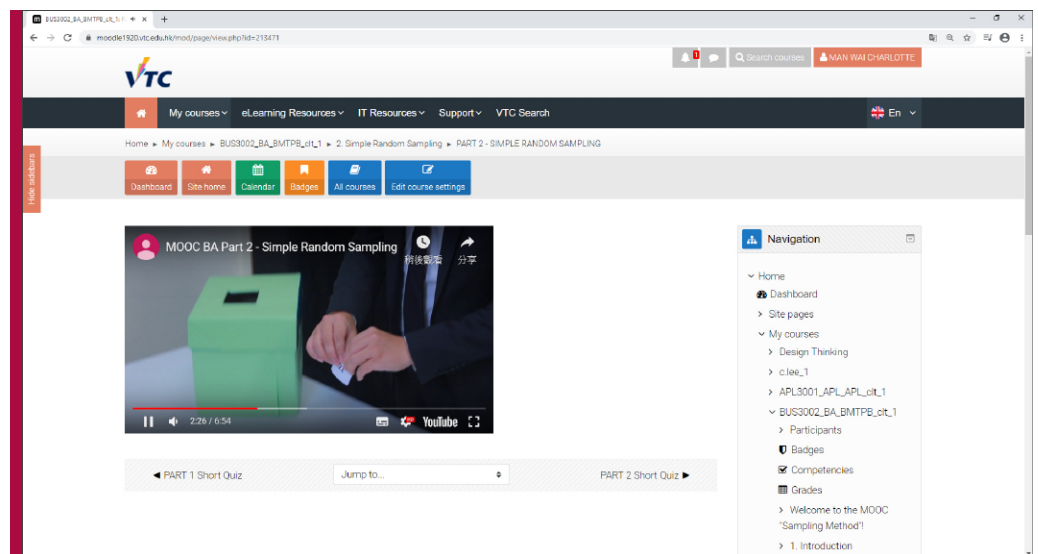
3. Followed by a short quiz to strengthen the knowledge learnt in the video
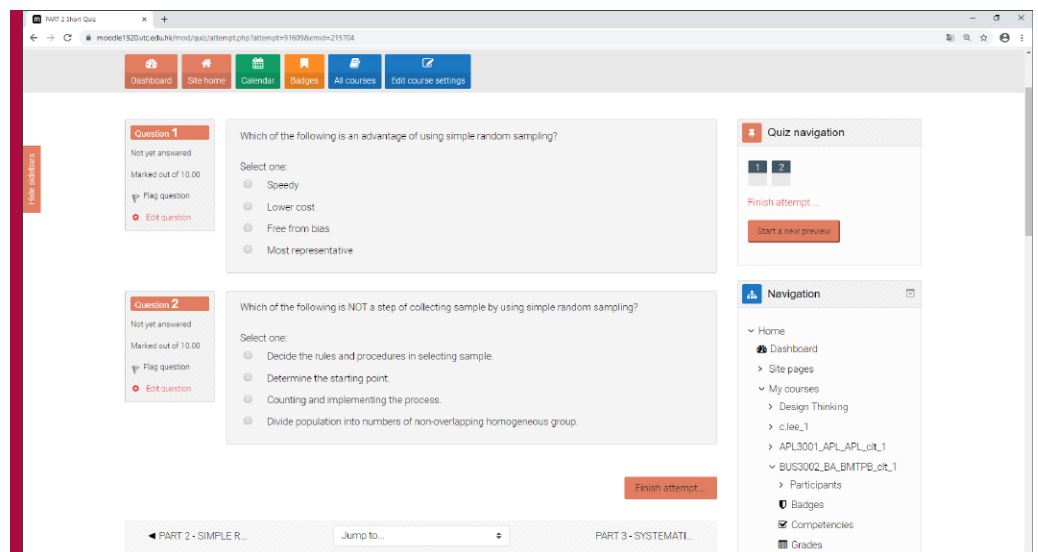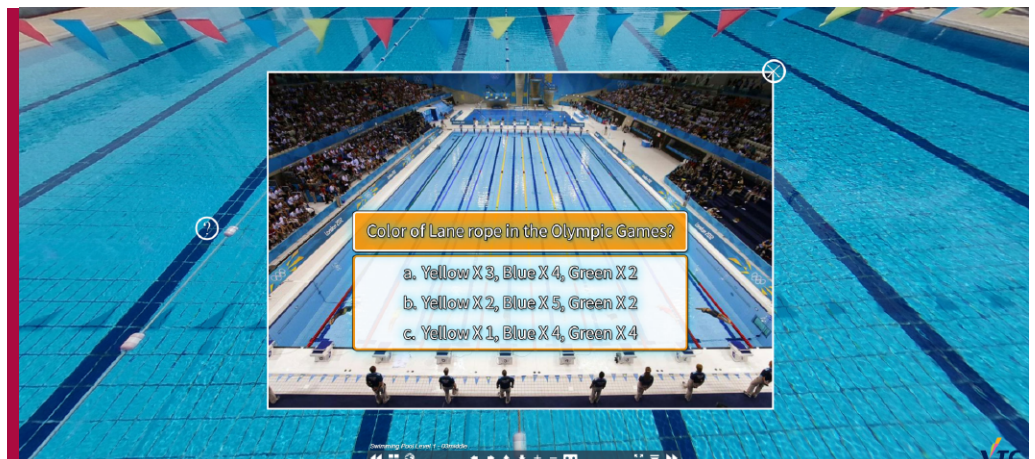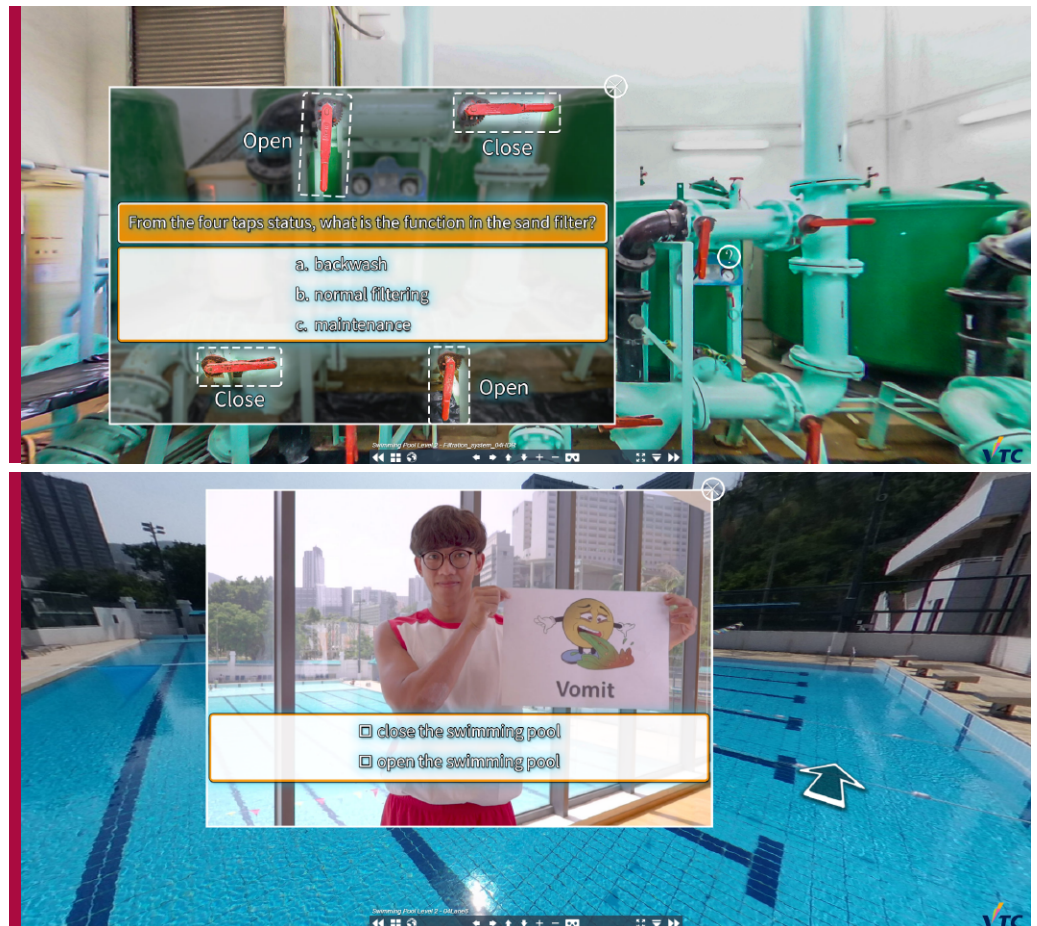
A 360 Panoramic VR Application by Hospitality Discipline

1. Provide 360-degree panoramic Virtual Reality Experience in the authentic swimming pool and filtration system
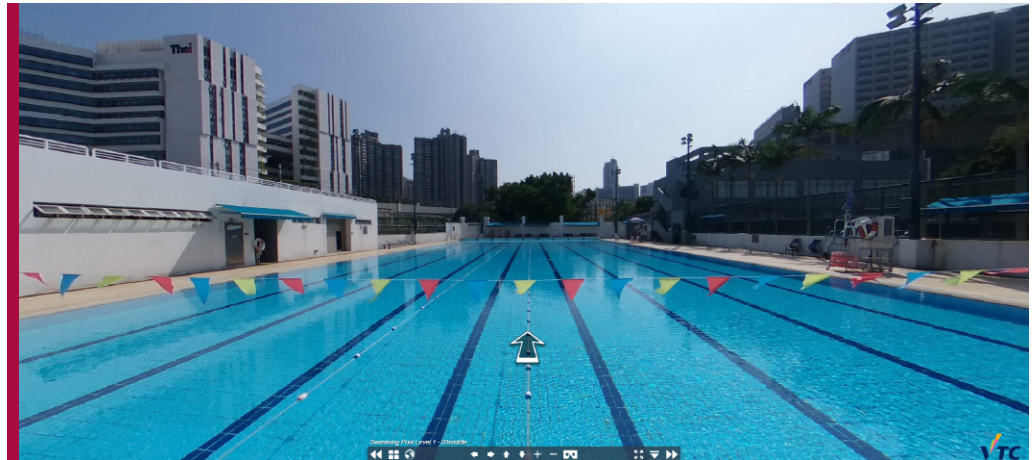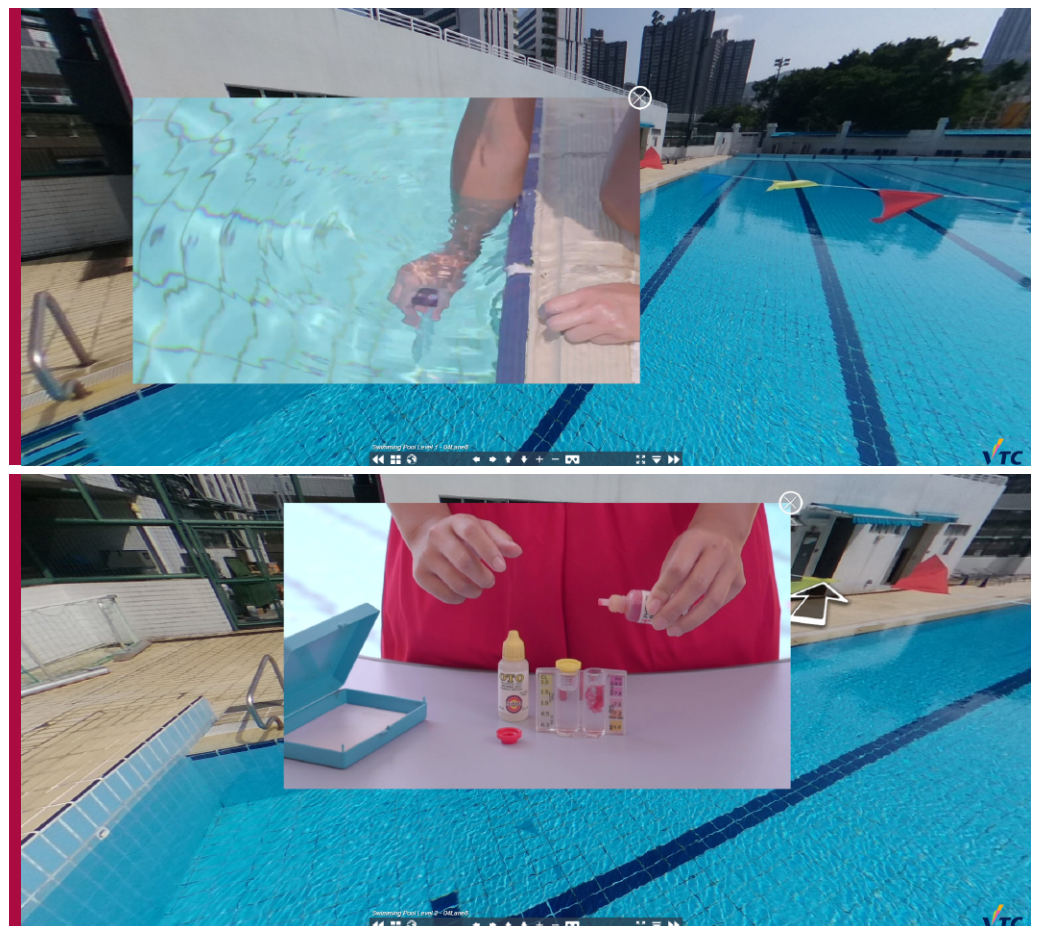

2. Multiple Choice Question (MCQ) and Sequencing are used as assessment tasks to check students' learning effectiveness

3. Procedural videos are used in some MCQs to enhance students' learning

6 Useful Webpages

The following webpages are academic writings on the topics of e-Learning and online learning. Please take time to read them to find out more practical ways and tips on designing your own online teaching.

A Basic Guide to Learning Objectives

http://www.northernc.on.ca/leid/docs/guidetolearningobjectives.pdf

Communication from The Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of The Regions on The Digital Education Action Plan

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0022&from=EN

Digital and Online Learning in Vocational Education and Training in Serbia (A Case Study)

https://www.etf.europa.eu/sites/default/files/m/DC024C02AA9B9384C12580280043A0B6_DOL%20in%20VET%20in%20Serbia.pdf

e-learning methodologies A guide for designing and developing e-learning courses

http://www.fao.org/3/i2516e/i2516e.pdf

Good Practice in VET Teaching and Learning – a guide to practitioner perspectives

https://vdc.edu.au/wp-content/uploads/2018/07/Final_User_Guide-April-2018.pdf

7 Online Resources by CLT

The Centre for Learning and Teaching has prepared comprehensive e-resources in the topics of Moodle and Panopto for both teachers and students. An online video is also ready for teachers to learn basic tips of starting online teaching with an aid of Moodle and MS Teams.

Moodle Resources Website

http://elsupport.vtc.edu.hk/

Panopto Website

https://clt.vtc.edu.hk/tel.php?page=panopto

Panopto Quick Guide

https://clt.vtc.edu.hk/downloads/PanoptoQuickStartGuideforTeacher_20191105.pdf

Training on Online Teaching with Moodle and MS Teams (Video)

https://lecturecapture.vtc.edu.hk/Panopto/Pages/Viewer.aspx?id=f6878cd8-99c2-4101-8708-ab09003bd22d

⑧ Enquiry

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2. Jasinski, M. (1998). *Teaching and Learning Styles that Facilitate Online Learning: Documentation Project; Project Report*. Douglas Mawson Institute of TAFE.

3. Kemshal-Bell, G. (2001). The online teacher. *New South Wales, Australia: Department of Education and Training*.

4. Schofield, K., Walsh, A., & Melville, B. (2000). Online learning and the new VET practitioner. *Sydney: UTS Centre for Vocational Education and Training*.