

Developing a Community of Practice of Flipped Learning for ICT Teachers Teacher's Guides

Introduction

The Information Technology Discipline, the Hong Kong Institute of Vocational Education, has conducted the project entitled “Developing a Community of Practice of Flipped Learning for ICT Teachers” which has received funding from the Quality Education Fund (QEF). This project should benefit both teachers and students in the following ways:

- Promotion of shift of learning paradigm from passive to active, interactive, student-directed and higher level learning
- Better support for students of different learning needs
- Ready-to-use learning materials for starting up flipped learning by the ICT teachers

Project Goals and Objectives

- To develop a Community of Practice (CoP) which promotes ICT teachers to use Flipped Learning approach for the delivery of the senior secondary ICT curriculum
- To promote student-centered learning for the development of domain knowledge
- To encourage teachers and students to adopt active and interactive learning pedagogy
- To develop learning and teaching materials for supporting student-centered learning

Targets

All ICT teachers of senior secondary schools in Hong Kong are welcome to join the CoP.

How to Join the CoP

The teacher of Senior Secondary School ICT Curriculum can contact us by email at flipped-ict@vtc.edu.hk for the enrollment form and procedure.

Enquiries

If you have any questions about the CoP, please contact us by email at flipped-ict@vtc.edu.hk.

Learning and Teaching Materials

Learning and teaching materials for selected topics from the Senior Secondary ICT Curriculum are available for download by teachers. ICT Teachers can use the materials for the flipped learning classes.

- a) Materials for selected topics of the following parts are available. On the Online platforms (Moodle and VLE), each of the parts is categorized as "Course".
- Compulsory Part (Core)
 - Elective Option (A) – Databases
 - Elective Option (B) – Data Communications and Networking
 - Elective Option (C) – Multimedia Production and Web Site Development
 - Elective Option (D) – Software Development
- b) Each of the courses contains number of topics. A topic includes the following materials:

Material	Usage
Video / Visualizer	Student should watch the video(s)/visualizer(s) before lesson. A topic may contain one or more videos / visualizers.
Online Pre-class Exercise	Student should complete the online pre-class exercise after watching the video or using the visualizer. The teacher can review the result of the pre-class exercise before the lesson. The Online Pre-class exercise is only available on VLE platform.
Pre-class Exercise (File)	The pre-class exercise file has the same content of the online pre-class exercise.
Powerpoint	Powerpoint File. Recommended to be released after the student watched videos/visualizers.
In-class Exercise	The In-class exercise can be used in regular lesson.

Online Platform

The materials are released through the following two platforms. You can download or access the materials from one of them. User guide for the two platforms are provided in the next section.

- VLE (URL: <https://vle.hkedcity.net>)
- Moodle (URL: <https://flippedict.vtc.edu.hk>)

Online Platform – VLE

a) User Account

The VLE platform is maintained by HKEdcity. You will need to provide your HKEdcity user account to us by email at flipped-ict@vtc.edu.hk with the following information. We will share the courses to your user account after verification.

Email Subject	<u>Create VLE user account</u>
Name of School	_____
Name of Contact Person	_____
Telephone Number	_____
HKEdcity User Account Name	_____
Elective Option (i.e. A, B, C or D)	_____

b) Login

Go to <https://vle.hkedcity.net> → Click Go To VLE → Enter your login information

You should have completed the above step a) for user account creation before you can access the courses.

c) Courses

i) Available Courses

You should only see the courses shared with your user account.

- AiTLE-IVE-QEF - Flipped ICT – Core
- AiTLE-IVE-QEF - Flipped ICT - Option A : Database
- AiTLE-IVE-QEF - Flipped ICT - Option B : Networking
- AiTLE-IVE-QEF - Flipped ICT - Option C : Multimedia
- AiTLE-IVE-QEF - Flipped ICT - Option D : Programming

ii) Copy course content

You can copy content from a shared course to your own course. For detailed instructions, please visit: <https://community.canvaslms.com/docs/DOC-12935-415257077>

Online Platform – Moodle

The Moodle platform for the CoP serves as a resource repository. The materials are archived by topics in zip file format. You can download the materials for your offline use.

The website of Moodle platform: <https://flippedict.vtc.edu.hk/>

a) User Account

A user account is required to access the Moodle platform. One user account will be created for each of the participating schools, the login information will be sent to the representative teacher.

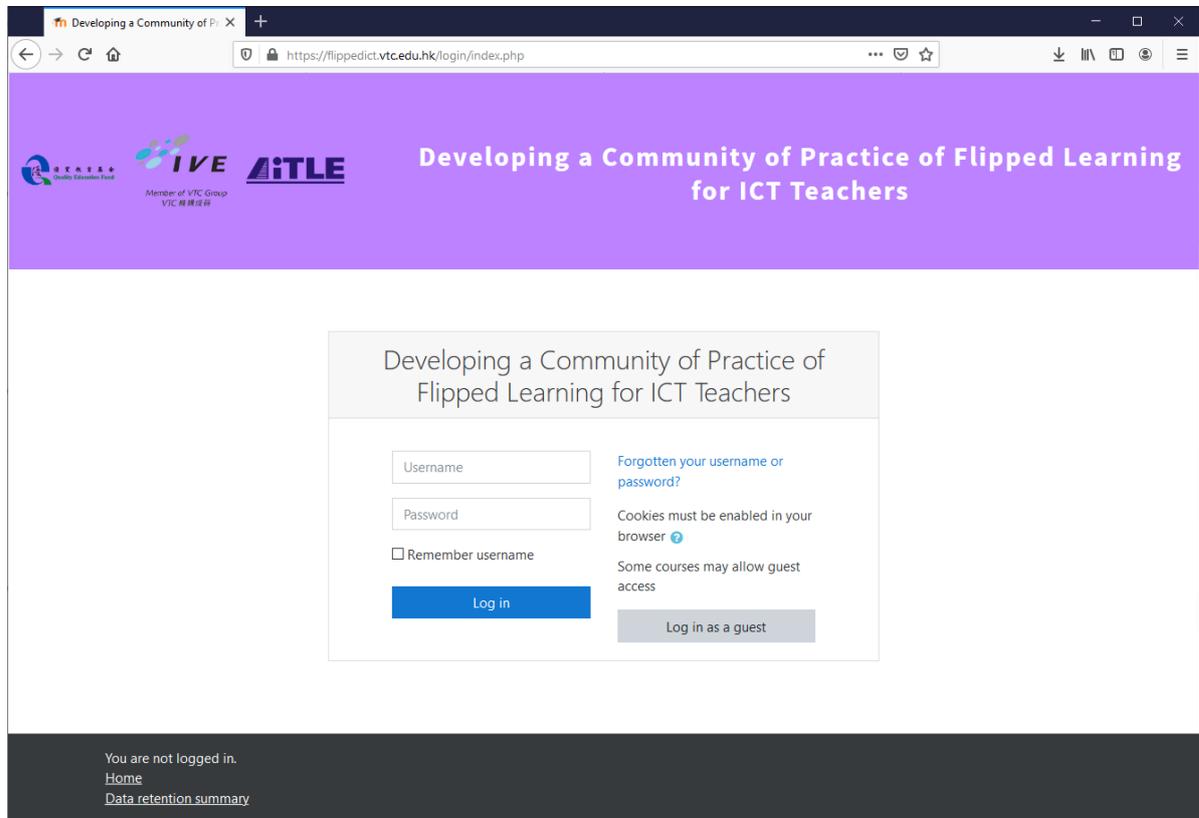
Only ONE user account will be created for each school. If your school has more than one teacher using the platform, all the teachers shall share the same user account. If your school does not have a user account for the Moodle platform, please apply a user account for your school by sending email to us at flipped-ict@vtc.edu.hk with the following information. We will create a user account for your school after verification.

Email Subject	<u>Create Moodle user account</u>
Name of School	_____
Name of Contact Person	_____
Telephone Number	_____
Email	_____
Elective Option (i.e. A, B, C or D)	_____

b) Login

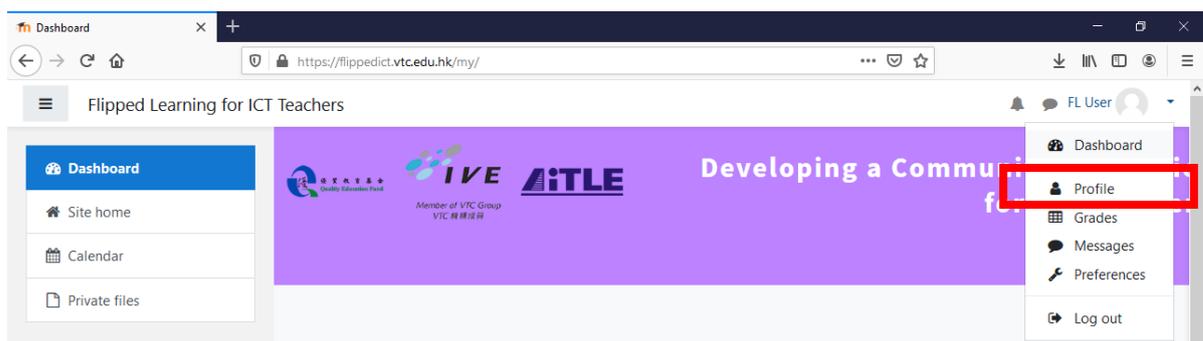
Go to <https://flippedict.vtc.edu.hk/> → Enter your login information

You should have a user account before you can access the platform.



After login, you can change your password, email, etc. according to the following steps:

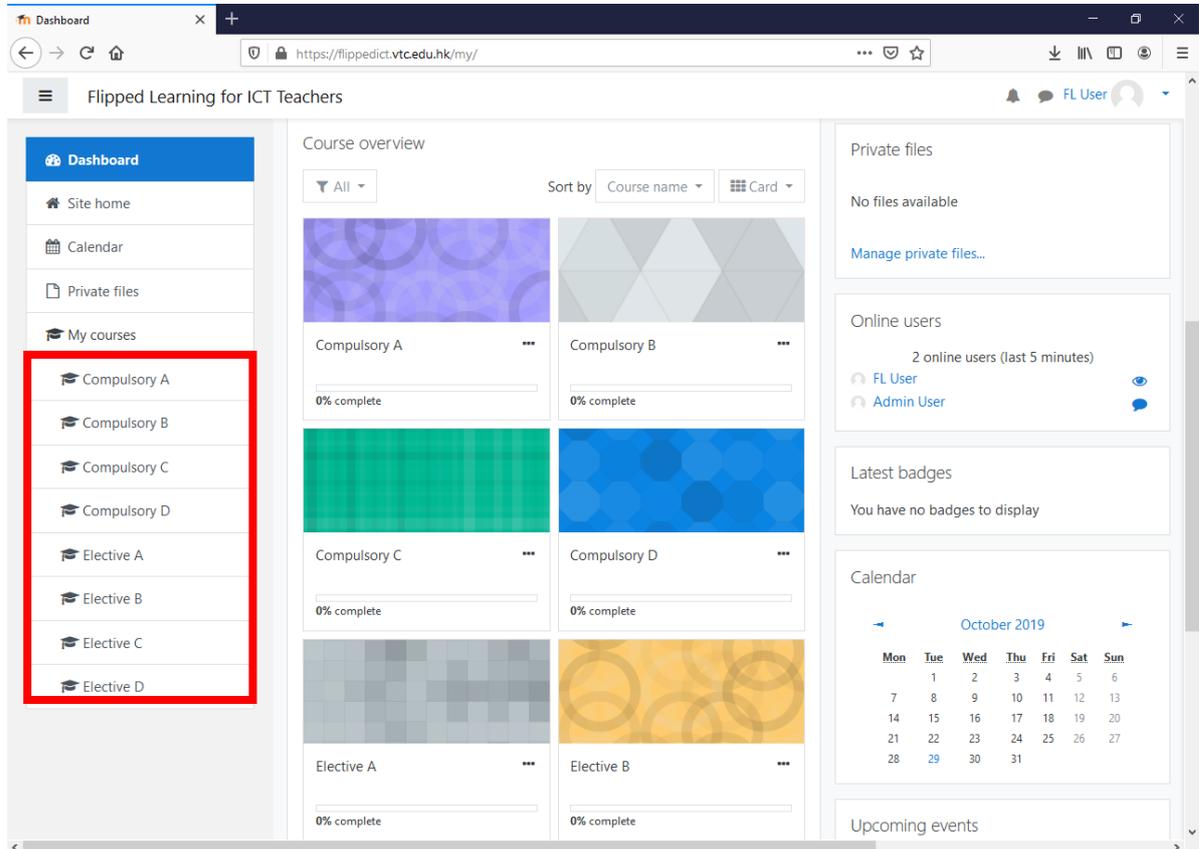
After login → Click the user name at top right corner → Select Profile → Edit Profile



c) Course

The courses (as rounded by red box below) are listed in the left pane. Click a course to browse the course page.

Note that the materials are developed and released by phases. Only courses have materials are visible.



d) Download materials

Click the link (as rounded by red box below) to download the materials in zip file format.

The screenshot shows a Moodle course page for 'Compulsory B'. The page is titled 'Compulsory B' and has a breadcrumb trail: 'Dashboard / My courses / Compulsory B'. The main content area is divided into three sections: 'CPB - (a) Basic Machine Organization', 'CPB - (b) System Software', and 'CPB - (c) Computer Systems'. Each section contains a list of activities with checkboxes for completion. The following table summarizes the activities shown in the screenshot:

Activity Name	Completion Status
CP.B - (a1) Explain the functions of hardware within a computer system	<input type="checkbox"/>
CP.B - (a2) Explain the structure and functions of a CPU and its components	<input type="checkbox"/>
CP.B - (a3) Fetch-decode-execute cycle and the roles of registers and buses	<input type="checkbox"/>
CP.B - (b1) System Software	<input type="checkbox"/>
CP.B - (c1) Computer Systems	<input type="checkbox"/>

At the bottom of the page, there is a footer area with the text: 'You are logged in as FL User (Log out)', 'Reset user tour on this page', 'Home', and 'Data retention summary'.