

The project aims to develop a number of micro-modules to facilitate flipped teaching of real estate concepts and towards the end to encourage student-centered learning. The theories of real estate are relatively abstract and therefore the students often find it difficult to understand. In the traditional classroom teaching, the instructor spends about 20-30 minutes to explain the concepts by providing different examples. Despite the examples being provided and the time spent, the learning outcomes are not very ideal. A number of students still find the concepts difficult to comprehend. They are not able to remember the concepts soon after the class is ended. Besides, explaining the concepts with examples is very time-consuming, leaving limited time for class discussion, deterring student-centered learning.

Nine micro-modules were developed, consisting of seven animation and two demonstration videos. The former explains the concepts that may not be observable in the real world, but can be shown through animation images. The latter explains the real estate concepts by showing its application in the real city like Hong Kong. These videos encourage visual learning, facilitating the students to visualize the abstract concepts and ultimately engage their memory.

The length of most micro-modules is in the range of three to six minutes to effectively capture student's attention. Only one micro-module, Monocentric City Model, has approximately eight minutes duration as it is not viable to separate the related explanation and examples into two videos.

As a flipped teaching, the students were required to watch the videos, uploaded via Panopto at Blackboard, before the class. In the class, the concepts were slightly explained to refresh their memory before the discussion. This allowed more time for class discussion,

Flipped teaching is still a challenging concept. A few students remained uninterested in flipped teaching. Some of them watched the videos before the class starts; others did not even view the video. Accordingly, quizzes for the selected topics were adopted. When the students were informed about the quiz, they would spend some time viewing the video. Quiz can be considered as a good means to encourage students watching the videos.

An interesting observation is that, although it was difficult to encourage students watching videos before the class, they watched the videos again before final examination. A number of students commented that the videos helped them to recap their memory and could be used as revision materials. Some students liked the videos as they were able to pause and rewind it anytime. The videos could help to adjust the learning pace of the students.

Overall, these videos facilitate to achieve my pedagogical goals.