

Flipping the Future Classroom

By Lai Hio San

Introduction

In recent decades, foreign educators are eager in questioning the efficiency of teacher-centered teaching methods. A research done by Lancaster (2017) from Arkansas State University found that “student-centered learning approaches lead to improvements in student performance over traditional teacher-centered instructional performances”. It also revealed that students generally indicated their wish in obtaining real connection to the world from what they were learning. All of these findings help us to understand that we need a change in pedagogy to obtain greater efficiency in students’ development in school.

As a teacher-to-be, I would like to search for an interactive, innovative and most importantly, student-centered approach. Thus, an effective learning and teaching method like flipped classroom is needed.

About the flipped classroom

Instructors adopting the flipped classroom model will assign students to preview the lecture materials at home. The materials will be in the form of videos, PowerPoint with voice over, etc. By the time of lesson, every student will have prepared the lecture. Therefore, in-class activities will be the opportunities for checking their understanding and for clarification.

This approach is beneficial to both teaching and learning; for teachers, they can spare time in class for asking questions and assigning discussions rather than presenting knowledge that may run the risk of leaving weaker students behind; for students, they can move according to their own pace when previewing the teaching materials at home and no longer need to keep up with the teacher’s verbal speed. Therefore, it is giving



learning back to the students.

Stereotypes about flipped classroom

Students especially those in Asian countries will have a false impression that “flipped classroom advocates self-learning, so flipped classroom is only suitable for the students with good academic proficiency. For the other students, flipped classroom wastes their time.” In fact, flipped classroom is more than just self-exploration. It helps students to identify their pace in learning and make teachers aware of students’ weaknesses by data collected from video software while they watch it. In response to that, teachers can set up more tailor-made practice, demonstrations and individual Q&A sessions in each lesson. Therefore, it can actually enhance both teaching and learning efficiency.

The second stereotype people always hold is “students will not learn by themselves”. As responded by the study Strayer (2007, 2012) conducted, students have reasoned their failure adjusting to flipped classroom partly because of a shift in individual learning responsibility.

Nonetheless, students can obtain self-discipline in flipped classroom with the help of some self-engaging software, like Classcraft.

Lastly, flipped classroom is not simply watching videos without guidance. Students always need to answer questions which check their understanding during or after previewing the learning materials. Once they have doubts, they can make comments through online platform. Hence, a careful selection of proper video software can avoid such stereotype.

Resources supporting flipped classroom (Pre-class, during class and post-class)

Pre-class: Edpuzzle

According to the study concerning flipped classroom by Lage et al. (2000), teachers spent less time to prepare every lesson after they set up the suitable foundation. This means that when coherent software that carry clear demonstration are used, the preparation time can be greatly reduced, teachers can focus on important queries from students. Therefore, a careful

selection of pre-class materials takes a significant role in guiding students to learn at their own style as well as engaging students in deep exploration without face-to-face lectures from teachers.

Edpuzzle is an online software that allows teachers to edit videos from hosting sites like Youtube, Khan Academy, TED Talks, etc. After importing their chosen videos, teachers can edit the length of the video. Apart from video editing functions, Edpuzzle provides voiceover function which allows teachers make video lesson more adaptive to their teaching. Nevertheless, there is also a quiz function which is embedded in the video. Teachers can set questions for students to answer at specific point of the video. Students should answer these while watching the video. (Figure 1)

Edpuzzle is a very important element for the flipped classroom as teachers always want to ensure students' understanding of the materials before they perform the tasks given in lesson. If students fail to understand the materials, teachers can obtain the area children struggle by referring to the most repetitive video portion. (Figure 2) Then,

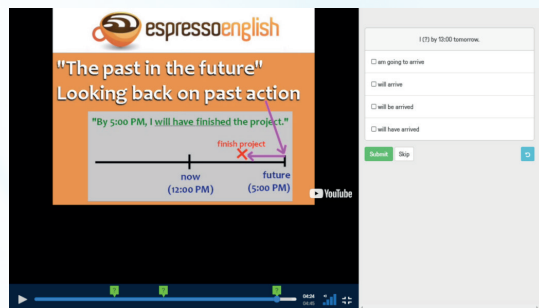


Figure 1: Questions in Edpuzzle video lecture

they can focus on this area and consolidate throughout lesson.

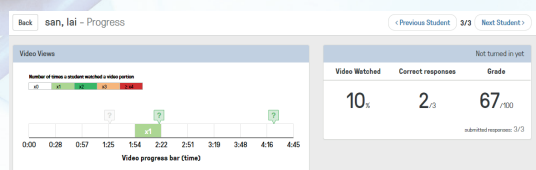


Figure 2: Evaluation of students' performance

In-class: Classcraft

Classcraft is a game-based platform. Inside Classcraft, students can choose to be a wizard, a witch, a clergyman or a warrior. This role enables them to experience different lives inside the virtual world. Teachers can use Classcraft for improving classroom behaviours. When students accomplished the work before class, during class or after class, they can obtain a reward in the Classcraft world. For example, doing an online check-

up quiz allows students to get 20 experience points. Getting correct answers for questions associate with the online lecture video asked during class can obtain 40 experience points. Failing to do homework after class makes students lose 30 health points of the characters they hold or lose in a battle in that day. (Figure 3) All these points help students to unlock new power of their characters inside Classcraft. (Figure 4), thus, enhanced their motivation of self-learning.

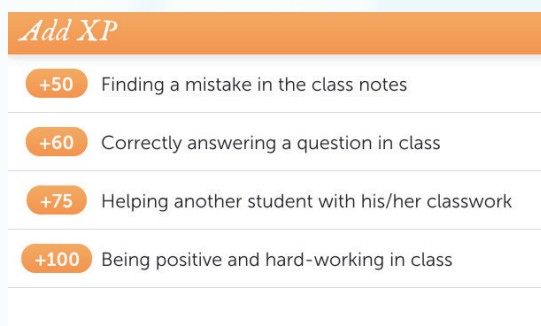


Figure 3: Students can obtain points for their behaviors in class

Post-class: Google Site, Google Group

Flipped Classroom emphasizes learning continues even when class ends. Therefore, we need a platform to support this extensive learning style.

Google Site is free of charge and combines lots of functions needed for

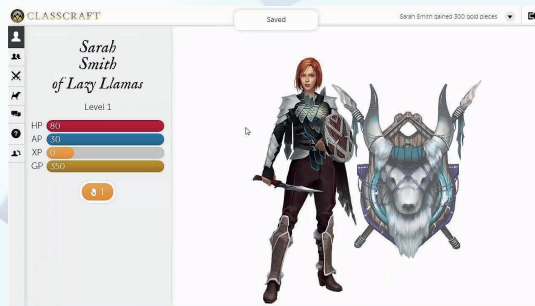


Figure 4: Students get motivated when accumulating points for their characters

organizing lecture materials and extra materials. (Figure 5) On the site, teachers can set up a web page for the class on a particular subject. Students can explore relevant materials concerning the topic they have learnt from the videos through news and blogs teacher posts on the site.

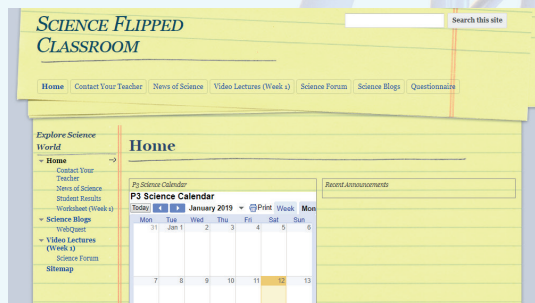


Figure 5: An example of a Science Google Site

Apart from posting videos onto the site, teachers can also set up forums for students to exchange ideas among the class concerning the materials taught or homework need to be done. (Figure 6) By doing so, teachers can

evaluate the area of difficulty students have and clarify the misunderstanding.



Figure 6: Google Group forums can be embedded in the site for communication among teachers, students and parents

Conclusion

Student-centered learning has been a global trend for the recent decades. Flipped classroom changes students' learning and makes learning to be more student-centered. Compare with the traditional education, flipped classroom stimulates students in self-exploration and educators in redefining the role of teachers and students in lessons. Thus, I believe a gradual change toward this model is expected in Macau. 🇲🇴

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