

*Perceived Benefits and Challenges of Flipped Classroom:  
Voices from Teachers in Hong Kong's Higher Education*

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**Abstract**

Flipped classroom is increasingly being adopted in higher education institutions worldwide. Many studies on flipped classroom focused on evaluating its impact on students. Relatively little is known about the perceived benefits and challenges of flipped classroom from the teachers' perspective. The present research conducted in-depth interviews with 28 teachers from diverse academic disciplines in five different universities in Hong Kong. These teachers were recruited to share their experiences in adopting flipped classroom in their practice. Flipped classroom was found to be associated with many benefits to the teachers, such as gaining the flexibility in the use of class time, increased opportunity for the teachers' professional development, and enhanced interaction with students. However, there are challenges in integrating flipped classroom in their teaching practice. Specifically, many found it challenging to motivate students to engage in the pre-class learning material. Their workload also increased when implementing and managing the flipped classroom. It was difficult for some of them to adopt the new teaching approach. The teachers also shared a variety of strategies to overcome these challenges. Possible measures of institutional support to help teachers to reap the benefits of this new learning approach while mitigating the challenges will be discussed.

Keywords: Flipped classroom, higher education, eLearning, teaching strategies

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## **Introduction**

Flipped classroom is an innovative pedagogy that is emerging in higher education institutions worldwide. It reverses the traditional lecture-based style teaching by requiring students to learn basic materials prior to class, so that class time can be reserved for high-order cognitive activities such as group discussion and hands-on exercise. According to Brame (2013), four key elements are essential to the flipped classroom approach:

1. *Exposure*. Students should be provided with first exposure of learning material prior to class, most commonly in form of videos.
2. *Incentive*. Students should be given an incentive to prepare for class.
3. *Assessment*. There should be a mechanism to assess students' understanding of the material.
4. *Activities*. In-class activities that focus on higher level cognitive activities should be designed.

Existing literature indicate that flipped classroom has the potential to deliver a wide range of positive impacts on student learning. A number of studies show that student's motivation, level of engagement, and interaction have improved as a result of flipped classroom (Zainuddin & Halili, 2016). Students' perception toward flipped classroom are generally positive (Bishop & Verleger, 2013), and there are some indirect evidence that students' academic performance improved as a result of flipped classroom (O'Flaherty & Philips 2015). Many studies on flipped classroom focus on evaluating its impact on students. Relatively little is known about the perceived benefits and challenges of flipped classroom from the teachers' perspective.

## **Research Question**

Since teachers' belief and attitude are important factors in the success of pedagogical innovation (Long, Cummins & Waugh 2017), this study aims to gather university teachers' perception toward flipped classroom. Specifically, what kind of benefits have they experienced from the flipped classroom approach? What kind of challenges have they faced?

## **Method**

To address these questions, this study uses a qualitative approach. In-depth, semi-structured interviews were conducted with 28 teachers from diverse academic disciplines in five different universities in Hong Kong. Academic disciplines covered include science, business, engineering, social science, education, humanities, law, and medicine. These teachers have used the flipped classroom approach for at least one semester in their course. On average, the teachers flipped 3.3 weeks of the course (out of about 12 weeks in a typical semester). Each interview lasted for approximately 60 minutes. The interview questions covered the basic course background, the course design, the perceived benefits and challenges of the flipped classroom approach, as well as teachers' reflection toward the flipped classroom experience. All interviews were transcribed, and then coded using the NVivo 12 software. Informed by a grounded theory approach, the axial coding method were used to establish common themes from the transcripts (Strauss & Corbin, 1990).

## **Results**

### Perceived benefits to teachers

Among the many benefits of flipped classroom to teachers, the following three categories were most commonly reported by our interviewees:

1. Flexible use of class time
2. Teacher professional development
3. Enhanced interaction with students

First, many teachers (n=15) reported that they could use class time more flexibly after using flipped classroom. This is not surprising because students were expected to view learning material before class, thereby freeing up some class time that would otherwise be reserved for lecture. Second, many teachers (n=15) also found the process of making pre-class learning material a valuable experience for professional development. It gave them an opportunity to learn how to make good videos, as well as to rethink how to organize teaching material concisely. Third, some teachers (n=10) enjoyed the enhanced interaction with students enabled by the flipped classroom approach, as more time were available for classroom discussion. As students came to class with solid prior knowledge from their preparation, the quality of classroom interaction and level of engagement improved.

### Perceived challenges to teachers

The most commonly reported challenges of the flipped classroom approach to teachers are:

1. Increased workload
2. Difficulty in motivating students
3. Difficulty in adopting the flipped classroom approach

First, 18 teachers mentioned that implementing flipped classroom brought an increased workload to them, especially for those who were doing it for the first time. Teachers had to spend a lot of extra time and resources making or updating pre-class material (most commonly in form of short videos). Second, many teachers (n=17) reported difficulty in motivating students, as some students were reluctant to prepare for class in advance or participate actively in classroom activities. While such challenge are not unique in the flipped classroom approach, its impact is more salient because students may get lost completely in classroom activities if they have not prepared for class in advance. Third, some teachers (n=12) also found it difficult to adopting to the flipped teaching approach. For example, one frequently reported difficulty is to design interesting classroom activities relevant to the pre-class learning material.

## **Conclusion and suggestions**

Our findings revealed a number of perceived benefits and challenges of the flipped classroom approach from teachers' perspective. In general, the teachers interviewed had a positive perception toward the approach. They recognized the increasingly important role that technology will be playing in education and the huge potential for its wider use. In order to fully reap the benefits of the flipped classroom approach

while mitigating the challenges, further institutional support to teachers are needed. Such support may be in form of funding or technical support in making pre-class learning materials, professional development courses, and formation of community of practice to provide peer support. Successful implementation of flipped classroom depends not simply on the effort of teachers, but also support from their institution and acceptance from students.

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