

# Chapter 87

## Challenges in Implementing the Flipped Classroom Model in Higher Education

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### **ABSTRACT**

*The flipped classroom as typically applied in higher education, consists of delivering lecture material outside of classroom contact, leaving face-to-face class time for more interactive learning, discussion, integration, and application of content (Grant, 2013). Increasing numbers of teachers in higher education are considering implementing this model in light of the perceived benefits of a more active engagement of students in their learning, be it in education, interior designing, medical, sciences, social science, business and management programs (Fulton, 2012; Grant, 2013; Roehl, et al. 2013). However, there are challenges in implementing this model. This chapter aims to identify some of the more common challenges. Finally, an example of ‘work in progress’ of addressing of these challenges in ‘flipping’ the classroom in a first-year university course.*

### **INTRODUCTION**

The flipped classroom model has increased in popularity over the last decade (Bergmann & Sams, 2012, Davis, Dean, & Ball, 2013; Enfield, 2013). This model differs from a traditional classroom in that course content is introduced to students not through lectures but through other ways outside of the classroom. As a consequence of the technological affordances in recent years, in many flipped classroom models this is typically done through recorded lectures or shorter video-clips which the students are required to watch in their own time. Subsequently, in the classroom, the students engage with the lecture content through more active approaches. By ‘active’ is meant that students do not just ‘consume’ what is deliv-

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ered from the front of the class in a didactic way, but that they are actively engaged in making sense of the material. For example, through problem-based activities, brainstorming, group/pair work. There is much diversity and many emerging understandings of what the model entails, and it is likely that this is to continue for some time to come.

It is important to emphasise that although in many flipped classroom models, recorded video lectures, or short video clips are used, the defining characteristic of the flipped model is not the use of video, but moving the typically transmission-mode or didactic delivery of course content out of the classroom and to the students' out-of-class study time. The "Flip Classroom Network" provides the following definition that captures this defining characteristic:

*Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter. (FLN, 2014, p.1)*

Abeysekera and Dawson (2015, p.1) provide a more succinct definition, also foregrounding the active nature of what happens in class instead of merely focusing on the use of videos: "Flipped classroom approaches remove the traditional transmissive lecture and replace it with active in-class tasks and pre/post-class work"

One criticism that could be aimed at the current popularity of this model is that this approach is not new at all and that many teachers have been actively engaging their students for quite some time, whether in lecture settings or other delivery models, such as seminars, or workshops. Furthermore, there is an increasing interest in making lectures more interactive. For teachers who would typically engage their students already through active learning approaches in lecture based sessions, this model nonetheless could enhance what they are doing by freeing up more time, and adding technologies that may appeal to the current generation of learners. Time could be freed up by, for example, reducing the number or length of lectures. This switch would allow them to spend even more time discussing and solving problems (Becker, 2013). Although the literature suggest that the Flipped Classroom Model has been a particular issue of interest in United States education for some years now, but it has also started to attract attention elsewhere in the world (see for example Abeysekera & Dawson, 2015; van der Meer et al, 2015).

However, there is not just one way of 'flipping the classroom'. The literature provides an increasing number of example of teachers who report on their version of what a flipped classroom could look like. One such example is that of Bergmann and Sams, two science teachers teaching in a High School in Colorado (Davies, Dean & Ball, 2013). They sought to be responsive to the needs of students who were not able to attend their lessons due to outdoor activities or for other reasons. They began with the idea of making videos of their lectures and posting these online so that students who missed classes could catch up. Their intention of making the videos, however, was not only to allow the students to view what had been taught, but also to have more productive learning in their face-to-face contact with each student during class. Both authors believe that by allowing students to watch the videos prior to coming to class, they were able to spend more time in facilitating constructive activities such as problem solving and project-based activities. Their aim was also to use the freed-up time to help struggling students on a one-to-one basis in the classroom, and allow for differentiated teaching approaches.

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