1. Introduction

The flipped classroom is an approach which inverts the traditional classroom so that activities requiring lower level cognitive skills, such as reading and knowledge transfer, are moved outside the classroom. Students are expected to engage in these sorts of tasks prior to entering the classroom. Precious classroom time is instead spent doing activities which would usually be set for homework.

The reason for using this approach was to respond to student feedback received on earlier runs of the module. Tax is a very technical subject which requires vast amounts of knowledge to be transferred before students stand any chance of applying the complicated legislation to real-life scenarios. Students were struggling to complete homework exercises outside the classroom.

Pushing the passive learning activities (e.g. learning the tax rules) outside the classroom enabled more efficient use of the classroom. Work previously set as homework was brought into the classroom. The student experience became much more personal, and hopefully led to students feeling as though they had more time to learn than they did before.

2. Practice/innovation detail

A crucial element of a successful flipped classroom is the creation or curation of video resources for students to watch before attending class. Each week I produced a short video (between 5 and 25 minutes depending on the topic) for students to watch before attending class. Each video clip provided the most basic information needed for the particular topic.

In order to assess to what extent students had understood the pre-sessional reading and video clip, at the start of each class, I would ask the students to complete a quiz in learning sets. We formed the learning sets randomly during class in week 1. The quizzes typically included 10 questions and were completed via Socrative, an online quiz tool. Students connect with their smartphones, tablets and laptops so I don’t need to print anything, which is helpful given our team’s zero budget for printing.

I was concerned some students would have access issues owing to not having the right equipment or being unable to connect, so I decided the quizzes should be completed in groups. Nobody has been excluded from the activity as at least one member of the group can normally get access. An unexpected benefit of the quizzes has been that it energises the classroom after what is a long
afternoon for the students (we have another module together directly beforehand). Each week I enter the group scores into a leader board, which further motivates the students.

Arguably the most important aspect of the flipped classroom is the in-class activity. This gives the opportunity for students to put what they have learned from the videos and pre-sessional reading into practice. I tend to send a combination of practice exam-style questions and practical scenarios for students to work through at their own pace. This makes the learning experience much more personal to each student. One of the problems of this approach is that it can sometimes be difficult to ensure enough time is devoted to each student. There is only one of me and 30+ students. For particularly technical or complex topics, it would be useful to have an extra pair of hands to help out.

3. Evaluation

Mid-module evaluations results showed that students find the videos useful as they can watch in their own time as many times as they need to. They can also go back to the videos for revision. Given the changing landscape of University students, with many balancing full-time study, part-time jobs and demanding family commitments, video can be a useful tool to get maximum impact in minimum time. A number of students also requested the use of videos in other modules.

The quizzes help to energise the classroom and there is a buzz of competition between the learning sets each week when the leader board is unveiled. Some students in the mid-module evaluation suggested they would prefer to have chosen the learning sets, but some said they like the opportunity to ‘communicate and work with people they wouldn’t normally.’ Despite acknowledging the quizzes are challenging, the general consensus is that the quizzes act as a helpful reminder of the topics they have read about or watched before embarking on more complex questions.

The students enjoy the classroom activities as they are ‘useful for finding weaknesses in knowledge’ and they ‘can quickly get help’ rather than being ‘bogged down’ when attempting the questions at home. I was also pleased to see recognition of the fact that classroom activities are only helpful ‘provided you have watched the videos.’

4. Conclusions

Flipping the classroom was a fantastic experience and I will certainly continue with this approach into 2015/16 and beyond, albeit with some adjustment. I will be experimenting with new ways to create the short introductory video clips as well as providing additional quizzes for students to attempt after class.

The main barrier to flipping the classroom is how much time it takes to do it, especially in the first year. I invested a lot of my own time in the module, which is not something to be taken lightly. Students have also found the flipped classroom time consuming, although the general consensus from my class was that they preferred the approach despite the extra time pressure. For those considering flipping the classroom, it is certainly not an easy alternative. It is demanding, challenging and a burden on your time. It requires experimentation with a variety of different
technologies for creating videos and encouraging an interactive classroom. On a more positive note, it energises the classroom, making contact time more fun. Students feel empowered to learn for themselves, which can only be a good thing.

It is also important to set the level of expectation early on. If students do not buy into the flipped classroom it will not work. They must come to every class prepared and find out the hard way if they are not. The quiz at the start of class can help as it encourages students to do the pre-sessional work to avoid being embarrassed when answering the questions in groups.

5. Further information

Please take a look at my portfolio which reflects on my experience of trialling the flipped classroom approach in tax: http://mahara.glos.ac.uk/view/view.php?id=5993.

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