Dr Jason Tangen

Context: The Science of Every Day Thinking (second-year); Judgement and Decision Making (third-year)

Pedagogy: Using the flipped classroom model is a more interesting way to teach and learn

Technology: Screenflow, Blackboard LMS, Facebook

Overview

Dr Jason Tangen is challenging the ‘sage on stage’ model of information delivery and has shifted his focus from teaching to learning. Jason flipped his classroom by creating and posting lectures online and uses face-to-face time to explore a range of active learning techniques to enhance students’ learning. His experience suggests that student engagement will increase using the flipped classroom model, and he has demonstrated significant changes in their critical thinking.

Case study summary

Benefits

• Using active learning in the classroom time allows opportunities for the teaching team to circulate around the class, listen to the students as they discuss key concepts, prompt students who don’t typically speak up, and provide as much input and feedback as possible to students’ direct questions.

• A key benefit of the flipped classroom is the opportunity to provide regular, consistent and excellent feedback to help students develop expertise.

• The lecture recordings are provided at different resolutions so students can have flexible access to the content on a variety of devices.

• Once the lectures are recorded, effort can be spent on researching, developing and planning activities with tutors, so the face-to-face sessions are ‘as incredible as they can possibly be’.

• Successful activities can be re-used in future iterations of the course, so the flipped classroom can allow clear opportunities for continuous improvement and enhancement of learning.
Issues to consider

- A significant amount of time is required for the initial planning and filming of the lectures and preparation of the activities when moving to the flipped learning model.
- Students need a full week ahead of each class to watch the online lectures and process the content; this gets easier with future course iterations.
- Coordinating large-scale discussions and debates in traditional lecture theatres with stadium seating is difficult. A far better alternative is to arrange a flat room with tables that seat 6–8 people. Randomly assigning students to seats each week helps to promote conversation.

Reasons for adopting the flipped classroom

Jason was not satisfied with what he was adding to students’ experience in the traditional lecture format and felt that he was merely parroting content from year to year. He was struck by famous quote, ‘If you can be replaced by a video, then you probably should be’, and felt the need to do something more worthwhile, both for his students’ learning and for his professional satisfaction as a teacher. Jason believes that flipping the classroom has created a much richer teaching and learning experience for himself and his students.

Planning

It is important to plan and prepare the recorded content well in advance so students have plenty of time to absorb the materials. If flipping a whole course for the first time, there may be some ‘running alongside’ the course delivery to have it done in time. However, future iterations may require only minor tweaks to the recorded lectures, thereby freeing up time to develop interesting activities to reinforce the content.

Flipping the class

Face-to-face component

For the course, ‘The Science of Everyday Thinking’, the tutorial and lecture are replaced by a two-hour weekly meeting. The first 20-30 minutes of each class is a weekly quiz based on online content and assigned readings (comprising 50% of their final grade). Quizzes are short answer questions that require students to write a paragraph to demonstrate their ability to contextualise what they have learned and are marked by tutors. The remaining time is spent on a variety of activities including discussions, demonstrations, debate, peer interactions and time to think.

Online component and assessment

- The video lectures were recorded using a Canon SLR (600D), tripod and zoom microphone (Zoom H2N), and merged with his Keynote (or PowerPoint) presentations
using Screenflow. This method is more sophisticated than is required and simple desktop recordings are sufficient.

- Throughout the semester, students discuss the course content on a Facebook page. The purpose of the page is to foster a dialogue about course material and to assist students in relating the material to new examples.

- Students are also required to apply the course content to different topics that have not been discussed in the course, with an assignment on a topic that is currently in the news. In being asked to generalise the content, students are finding links between the course and their everyday experience, which enhances long-term retention.

Conclusion

After some experimentation and considerable effort, Jason flipped his classroom to create courses that are more fun and intellectually stimulating to teach and resulted in better learning and higher interest among students. The anecdotal evidence from students suggests that they enjoy his classes, which focus their learning through active learning techniques. The classes have become an interactive and personal experience, where students exchange ideas and debate issues, and where Jason and his tutors now have more time to provide immediate, directed and thoughtful feedback. He did away with the traditional lecture format in favour of weekly meetings where students are compelled to prepare for a weekly quiz. Changing the terminology for lectures to ‘meetings’ ensures that students access the lecture content and readings at home, where they have the time and flexibility to reflect and assimilate the material before coming to class. Instead of ‘teaching by telling’, Jason has created a set of conditions that inspire students to learn independently.

Useful links

Discussion formats and activities (Cavanaugh, 2001)

Why scenario-based learning is effective (James Cook University)

Collaborative Learning/Learning with peers (Dartmouth College)

See the UQ ITS Tools A-Z guide on to how to use peer assessment in Blackboard.

For further information, see the TEDI Flipped Classroom website.

Acknowledgements

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