The Flipped Classroom: Inverting with Intention
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Overview

The “flipped” classroom is a pedagogical approach that inverts the traditional use of class time. In the flipped model, students are exposed to course content (e.g., videos, readings) prior to class, then during class, students will engage in active learning exercises. The goal is to devote more class time to application of concepts, group work, and other collaborative strategies that foster deeper and significant learning.

Overview Resources:
• EDUCAUSE’s 7 Things You Should Know About Flipped Classrooms: http://www.educause.edu/library/resources/7-things-you-should-know-about-flipped-classrooms
• Penn State’s Simply Speaking episode on the Flipped Classroom video (time: 3:24): http://youtu.be/26pxh_qMppE

What does the research suggest about the flipped classroom?

Research on the flipped model in higher education is emerging, though some evidence exists about its benefits. Lage, Platt, and Treglia (2000) found that the flipped model better addresses the variety of student learning styles, thus creating a more inclusive classroom environment. Lage et al. also found that students and instructors perceived the space favorably. Students favored the flipped model to the traditional model and reported a high level of satisfaction with peer group work. Faculty members perceived higher student motivation and a greater satisfaction teaching the course in the flipped format.

More broadly, a wealth of research exists that details the positive impact of active learning pedagogy and space. Research conducted at UMN on active learning classroom (ALC) spaces have found the following:
• Students to outperform final grade expectations in ALCs than traditional classrooms.
• ALCs affect teaching-learning activities, even when the instructor attempts to hold these activities constant.
• Student performance improves when instructors move to active, student-centered teaching methods; in essence, lecturing in ALCs is not conducive to student learning.
• Students and instructors perceive ALCs in a largely positive light, but some pedagogy adjustment is necessary.

Research Resources:
• UMN Research and Evaluation Team’s Learning Space Research: z.umn.edu/lsr.

Considerations for Flipping the Classroom

Flipping the classroom requires a considerable amount of thought, planning, and (re)design, but it can be done! Before embarking on a flipped endeavor reflect on the following:
• Time. Flipping the classroom involves carefully examining learning objectives at multiple levels (department, course, unit, lesson) and the activities and assessments used to determine what and how students are learning.

• Teaching style. Adopting a flipped model requires an adaptation of teaching style. Instructors considering this approach should reflect on her/his style and how that will change both in the “flipped” material and during class time. The instructor’s role will change significantly with the flipped model.

• Space. Whether teaching in an active learning classroom or traditional space, instructors should be aware of the benefits and drawbacks of each setting. For example, teaching in an active learning space is decentering and requires instructors (and students) to attend to the position of the speaker.

• Class time. With the content delivery handled outside of class, instructors should think about how they will spend class time. Many active learning strategies exist, such as problem-based learning and cooperative learning. Many align with popular learning activities include: case studies, debates, and simulations. A nice overview of additional strategies for active learning can be found here: http://www1.umn.edu/ohr/teachlearn/tutorials/active/strategies/index.html.

• Training. Active learning classrooms and other technologically-infused spaces contain a number of features that permit instructors to utilize an array of new tools. Seamlessly orchestrating educational technologies requires some training and practice. Research from UMN on ALCs suggests that when instructors fumble with technology in detracts from the students’ learning experience.

• Assessment. Proponents of the flipped model suggest that students be assessed on the video/reading segments of the “pre” class materials. In essence, what will the students do while they watch the video, or right after viewing a lecture? Short quizzes are an example of ways for students, and instructors, can determine how well the material was understood. These types of assessments may also help instructors shape the in-class time (i.e., mini lecture on challenging topics, review concepts). Other, less formal, options exist as well, such as creating a backchannel for discussion via social media (e.g., Twitter) or through the course management system (e.g., Moodle). Regardless of approach, this type of assessment will help determine if students viewed the material period to class.

What are some next, first steps I can take to prepare to flip my classroom?

A few additional considerations

• Set expectations. Be intentional and honest. Instructor enthusiasm for sets a very strong tone for the flipped model. Instructors should also tell students about the reasons why the model is being implemented.

• Start small. Begin with one lesson or one unit. As previously mentioned, flipping takes time. When determining how to record pre-class material, consider “chunking” content into pieces.

• Observe. Several faculty have taught in ALC space at the U. Ask them for an opportunity to observe a class period to get a general sense of the space/flow.

Additional Resources

Instructors interested in flipping their classroom have a number of central resources available to them at the U:

• Center for Teaching and Learning (http://www1.umn.edu/ohr/teachlearn/)
• Educational Technology Services (http://www.oit.umn.edu/educational-technology/)