



Strategies for Covering Content Series **PART 3: Flipped Classrooms**

A “flipped” classroom model is essentially an inversion of the traditional structure for both inside and outside class time. In a flipped classroom, students are exposed to course concepts and content prior to class (through videos, reading, podcasts, etc.), while class time is devoted to practicing and applying these course concepts through a variety of active learning activities. Research suggests that flipped models are still quite effective at covering content (e.g., Baepler, Walker, & Driessen, 2014; DesLauries, Schelew, & Wieman, 2011; Haak et al., 2011; Marshall & DeCapua, 2013). For example, Baepler, Walker, & Driessen (2014) found that students taking a high enrollment chemistry course in a flipped format performed at least as well as those in a more traditional, lecture-oriented course; additionally, “student perceptions of their learning experience tended to improve significantly with the move to the flipped, hybrid format” (p. 234).

Considerations for “flipping” the classroom

“Flipping” the classroom requires a considerable amount of thought, planning, and (re)design (EDUCAUSE, 2012). However, while it may take significant time and energy, the research (as noted above) demonstrates that if done thoughtfully, “flipping” your classroom can be well worth the effort for you and your students. Before embarking on the “flipped” endeavor, reflect on the following:

| Considerations | Explanations |
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| Time intensity | “Flipping” the classroom involves carefully examining the learning objectives at multiple levels (department, course, unit, lesson) and the activities and assessments used to determine what and how students are learning. Significant time must be devoted before the term towards developing materials like recorded lectures and online modules. Because of this, EDUCAUSE notes that the “flipped” model can be easy to get wrong. In order to avoid a failed experiment and a host of confused students, make sure you have plenty of time to devote towards planning and developing materials before you start. For help with aligning objectives, see this resource from CEE’s Program Assessment team. |
| Teaching style | Adopting a “flipped” model requires an adaptation of teaching style. Instructors considering this approach should reflect on their style and how that will change in both the “flipped” material and during class time. The instructor’s role will change significantly with the “flipped” model and promoting instructor “presence” is a key consideration. For more on “presence” in flipped classes, see this resource from EdTech Commons. |
| Class time | With the content delivery handled outside of class, instructors should think about how they will spend class time and generate student buy-in. Many active learning strategies exist, such as problem-based learning, cooperative learning, and group work. Many of these strategies align with popular learning activities, including: case studies, debates, and simulations. For strategies on implementing active learning activities in the classroom, see this resource from EdTech Commons, Parts 1 and 2 of this resource series, as well as our series titled “Activating your Lecture.” |
| 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 to 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., Canvas). |



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| | Regardless of approach, this type of assessment will help determine if students viewed the material prior to class. For more quick in- and out-of-class assessment activities, see PARTS 1 and 2 of this series, as well as our series titled “ Encouraging Student Motivation .” |
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What are some first steps I can take to prepare to “flip” my classroom?

Here are a few additional considerations and suggestions on how to get started with flipping your classroom:

| Strategies | Teaching Suggestions |
|----------------------------|---|
| Begin with the end in mind | Whether redesigning an entire course or just one module, instructors should determine student learning outcomes and the activities to support and assess them, and how they will foster student learning. Think of both content-centered (e.g., students will be able to summarize the main elements of the carbon cycle) and content-neutral outcomes (e.g., students will learn to work together collaboratively). |
| Set expectations | Be intentional and honest. Instructor enthusiasm sets a very strong tone for the “flipped” model. Instructors should also tell students about the reasons why the model is being implemented and how it will help improve student learning. |
| Start smart | While the “flipped” model takes some considerable planning, one need not “reinvent the wheel,” so to speak. Think about what you have in existence, what you can enhance or what you can employ. <ul style="list-style-type: none"> • <u>Existing content</u>: Much of the existing instructional materials (e.g., documents, Powerpoints, PDFs) can be repurposed for the “flipped” model. • <u>Enhance</u>: Adding enhancements to existing materials (e.g., voiceover slides, annotating video and documents) can be done through free or campus supported technology, such as screen capture software (e.g., Camtasia, Jing) and annotation software (e.g., Adobe Acrobat, Preview). • <u>Employ</u>: A number of high-quality and/or freely available resources exist to complement instructional material (e.g., Khan Academy, MERLOT, OER Commons, TED-Ed). |
| 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 | Many instructors have used the “flipped” approach. Ask them for an opportunity to observe a planning session, video recording, and class period to get a general sense of the preparation, technology tools, classroom activities, environment, and interactions. |

Additional Resources

For more suggestions on how to approach designing and implementing a flipped model in your own classroom see:

- UC Davis professor, Dr. Luca Comai’s blog on “[Flipping Genetics 101](#)”
- [Blended Learning Toolkit](#)
- [Flipped Classroom Infographic](#)
- [The Flipped Learning Network](#)
- [Ed Tech Commons](#)

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