



Making the Flipped Classroom Work

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Today's community college classroom is quite different from the typical classroom five or ten years ago. We continue to serve a diverse student body, but the students have changed in some critical ways. They have different experiences and learning histories, and we, as educators, must understand how learning has changed right along with the faces we see in our classrooms. Adaptation is not only desired but will be increasingly necessary to ensure our students the best possible education.

Gone are the days of the "sage on the stage" entering the classroom and spending one, two, or even three hours lecturing to students dutifully taking notes. With information so widely available on so many accessible devices, we no longer need to drill facts to be recalled on later tests. Instead, we must help our students to become better consumers of information, users of the knowledge they are gaining, and thinkers who expand on that knowledge.

There are always many buzzwords flying around higher education. Most of these current buzzwords focus on "student engagement." Instructors are encouraged to construct meaningful learning experiences using interactive, relevant, and exciting elements...all while holding students to standards, monitoring the learning objectives of the course, making sure that everything in the course is accessible and aligned, and more. This can be a daunting concept when planning a course, but it becomes easier when we, as educators, let go of our own expectations of what a classroom "should" be. Most of us learned in a classroom led by a lecturer. Our current students, however, are different and we must completely rethink course design to match our students if we hope for them to be successful.

This is where the flipped classroom enters the discussion. Though not the only way to create an engaging environment, it is a tried and tested course design that encourages a learner-centered classroom. Far from a teaching fad, the flipped classroom has been around long enough to create many resources readily available to help in course design and many faculty who are both experienced and happy to offer guidance. Flipping, at its core, prevents students from being passive receptors of facts and encourages them to be active participants in and owners of their learning. It enables deeper, more meaningful lessons that not only engage students' attention but also engage their active learning brains. A truly wonderful side effect of creating a flipped classroom is that it can also renew you as a faculty member, helping you to find excitement in learning and creating learning environments for your students.

So, what is a flipped classroom? A flipped classroom does exactly what is done in a traditional lecture-based course, but it reverses the locations of the different types of learning. Basically, it moves things like lectures, memorization, and other rote learning tasks out of the classroom and brings creation, analysis, and active and application-based learning into the classroom. It is based on the idea that there are different levels of learning, as described in Bloom's Revised Taxonomy: (Anderson & Krathwohl 2001)

- **Remembering/learning** This is the least active type of learning. This can be completed through reviewing information from the textbook or lectures and is the ability to retrieve learned information.
- **Understanding** This takes information that is remembered to the next level by expecting a student to not just to be able to recall the information, but to understand the information and to state it in their own

words. This is often accomplished through worksheets, writings, and further research on a topic.

- **Applying** This asks the student to take information that they understand and to apply it to a new situation. This is often accomplished by using experiments, case studies, or other activities.
- **Analyzing** At this level, students can break up the information and see how the various parts of it can be integrated into other situations. Students should also be able to tell the difference between facts and inferences. This is often accomplished using case studies, troubleshooting activities, or other tasks.
- **Evaluating** At this level, the student is expected to make judgements about the value of the information they have learned. It will include explaining the choices made and justifying them. This can be accomplished by scenario-based learning and may not have a clear-cut “right” answer.
- **Creating** This requires students to pull different pieces of knowledge from many different learning experiences and to combine them in new ways. This can be accomplished using larger project-based assignments asking students to create solutions for various scenarios.

In traditional classrooms, during class time, the emphasis is on remembering and sometimes understanding. However, the rest of the higher-level thinking happens outside of the classroom through assignments, activities, and other work completed independently. Because these higher-level assignments and activities are done without direct guidance from faculty, the students may have difficulty. The result may be high quality work, but more often students can become confused, causing them to fail to complete assignments or turn in work that is not well done. Flipped classrooms allow you, the faculty member, to eliminate the confusion by being present while the higher-level learning happens and guide students as they struggle to own the learning.

Many instructors have tried to incorporate some elements of a flipped classroom into their courses or have tried flipping a lesson without much success. Most of these failed attempts were well-meaning but were initiated before truly considering all of the aspects of the flipped classroom. There is more to successfully flipping a lesson than simply assigning outside reading and expecting the students come to class prepared and ready for meaningful work and discussion. Within the community college, for example, we are typically working with students who are in their first years of higher education and, while eager to learn, do not yet have the experience to digest outside reading and resources without guidance. Asking more of students than they are ready to provide has sent many an instructor with an unsuccessful attempt at flipping back to a lecture format course. To prevent this from happening, let’s start at the beginning of the process and see if we can offer some guidance.

The first step in the process is to identify learning objectives. What exactly do you want your students to learn? Outcomes are the first place a flipped lesson can go awry if they are not specific, measurable, and informative to the student. When you go on a trip, do you program your GPS with only the coordinates of the starting point? Of course not! Consider your learning outcomes to be the course GPS for your students, and clearly communicate them so everyone knows that what follows is planned specifically to help them to reach these goals.

The next important step is to introduce the idea of a flipped lesson to your students. Some will be excited by the idea of an active learning classroom, but others may be frightened of change from what they know or be concerned they will not be successful. Communicating your expectations clearly will empower your students’ success, both inside and outside of the classroom. Explain exactly what will be completed outside of class and what will be done in class, and how strongly the in-class work depends on the successful completion of the work required at home. This allows students to understand the importance of the out-of-class work. Be sure to take time to answer any

and all questions that the students may have. If a student is not familiar with flipped classrooms, they may need additional explanation and encouragement.

Now it is time to create and assign the out-of-class work. This work should focus on acquisition of information at the **remember/learning** and **understanding** levels. Learning objects and activities might include assigned readings, online videos, interactive websites, web quests, and other methods to impart basic knowledge. Consider this step the equivalent of your in-class lecture. This is the most common point of difficulty in the flipped classroom setup because students may not complete the out-of-class work. They may have previously been expected to read before class, but a lecture environment essentially reviews the reading for them and they would rarely find it necessary. In a flipped classroom, though, they absolutely must complete the at-home work, and the key component is accountability. A low-stakes formative assessment of readiness, such as a quiz, worksheet, guided notes, adaptive quizzing, etc., will allow the students to know they are ready for class and allow faculty an idea of content areas with limited understanding. These types of assessments are essential features of a flipped classroom design.

Once the students have demonstrated their readiness, it is time for the in-class active learning. This is where the magic happens! Your goal is to help the student master the **applying, analyzing, evaluating,** and/or **creating** levels. This can be accomplished in many different ways, including using case studies, debates, role play, creating original examples, project-based learning, and more. The possibilities are endless, but the work *must* link back to your learning outcomes. Active and engaging learning activities allow you to interact with your students on a whole new level. Students will ask questions and engage in ways that will amaze you. The bonus...this helps to increase our engagement as instructors, which, in turn, makes the students more motivated!

Finally, it is time to see if the students have learned what they were supposed to learn. Generally, when thinking about summative

assessment, faculty immediately think...tests. However, there are many other ways to assess learning, and it is likely that there is a better way to measure the learning from a flipped classroom than a multiple-choice test. Consider incorporating reflective journals, research logs, brochures, multimedia productions, concept maps or oral presentations as measures of your students' knowledge. Look closely at your learning outcomes and see if there are ways to measure mastery beyond the traditional test. Providing variety in assessment can help students who struggle with tests to demonstrate their knowledge in a manner that allows them to shine.

Almost every instructor we have met already flips at least some small part of a course, whether they planned to flip or not. However, not every flipped lesson is a success. The most common difficulties can be avoided by holding students accountable for required work and allowing for flexibility and variety in the classroom. Consciously linking everything through learning outcomes helps everyone involved to be successful as well. When both the faculty and the students are highly engaged in the learning process, it is easy to enjoy an exciting and dynamic classroom. This is the classroom that today's learner needs, and the flipped model can be used to make it happen.

Anderson, L. W. and Krathwohl, D. R., et al (Eds..) (2001) *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Allyn & Bacon. Boston, MA

ABOUT THE AUTHORS:

[Happy Gingras](#) and [Patricia Adams](#) of Pitt Community College are award-winning teachers and trainers who have been in the college classroom for more than a decade. They have extensive experience flipping their own classes and teaching others how to flip and blend their courses. They have shared their knowledge through presentations and workshops at local, state, national, and international conferences.

LEARN MORE:

Happy and Patricia share an array of strategies for getting started with flipped learning in the NC-NET webinar, *Flipping Foundations*. [Watch it](#) now!

