

'TIPS TO FLIP' THE CLASSROOM

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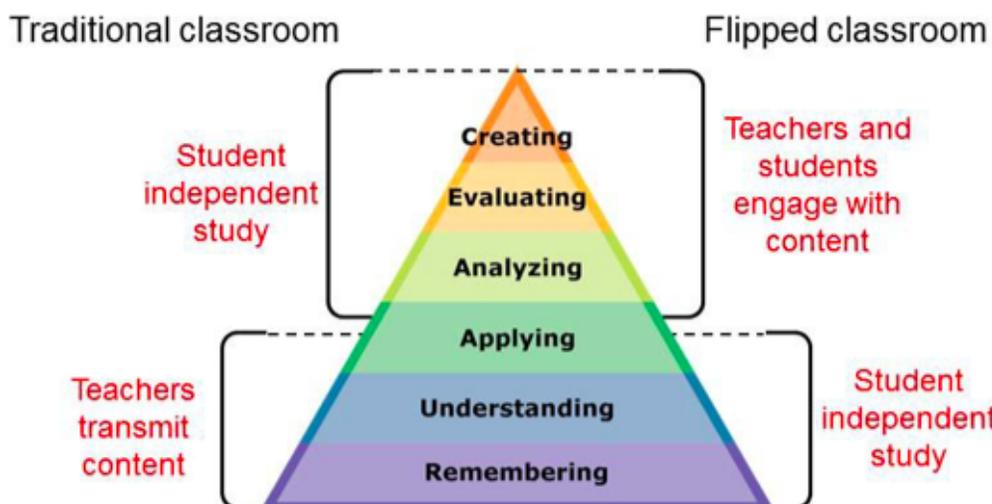
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ABSTRACT

The costs and benefits of the flipped classroom have been heavily debated in both general educational research as well as research in specific disciplines (e.g. accounting education). For flipped classroom learning to work, it cannot be an effort by one instructor in one section of a course. A successful flipped classroom has to be a department or school wide effort led by Deans and Department Chairs where faculty work collaboratively to assure that students are taught the skills to learn in this format, starting with the introductory accounting course. This article discusses best practices, which allow a flipped classroom model to be most successful across an academic program.

INTRODUCTION

Flipping the classroom, a heavily discussed and debated trend in education involves a reversal of traditional principles of Bloom's Taxonomy. The costs and benefits of the flipped classroom have been heavily debated in both general educational research, as well as research in specific disciplines (e.g. accounting education). In a traditional classroom, inside the classroom lectures typically focus on the lowest levels of Bloom's Taxonomy, which is demonstrating the ability to remember and understand. Following class, for homework, students are asked to independently work on the higher levels of the hierarchy, which involve apply, analyzing, evaluating and creating. Flipping the classroom moves the lowest levels of the hierarchy outside of class, leaving the students to independently remember and understand. Inside of class, the class time is used to work under direct observation of the instructor on the highest levels of the hierarchy to analyze, evaluate and create. In this setting, the class involves individual and group work on assignments and cases while the instructor provides individual attention to individuals and the group as a 'coach' instead of 'lecturer.'



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PERCEPTIONS OF THE FLIPPED CLASSROOM

There has been a considerable amount of research on the effectiveness of the flipped classroom. Much of this research has been positive, but there have also been negative results that support the best practice that this paper introduces to improve effectiveness of the flipped classroom. Philips and Trainor (2014) show that students prefer to learn using interactive means, which is a significant part of a flipped classroom format. The authors examined student perceptions through a survey specifically relating to accounting courses at a business school. The survey shows that students prefer to learn using techniques that would be part of a flipped classroom and open to the idea. The survey also shows that many instructors who do not flip the classroom are already using much of the recognized flip technology as part of their teaching. Findlay-Thompson and Mombourquette (2014) provide an example of how a flipped classroom was utilized in an undergraduate business course. In this course, the author, as course instructor taught three sections of the same course. Two sections were taught in the traditional model, and a third section in the flipped model. In this case, the results were mixed. Students had mixed views on the usefulness of the flipped model, and exam performance between the flipped and traditional sections was not significantly different. The paper did not say that flipped classroom technique was bad and should not be a consideration, but instead that it needs to be used properly by both the instructor and students to be an effective teaching methodology.

In this specific case, many of the student comments from the flipped sections were against the required work and responsibility outside of class required in this environment before attending a physical class. The students did not seem prepared for the learning expectations of a flipped environment. Haughton and Kelly (2015) look at the use of flipped classroom in a statistics class, which is a core course that has a wide audience of students. In this class, students in the hybrid/flipped format performed better on the final exam, but were not any more satisfied with the overall course. Students were not happy with the additional workload and shifting of responsibility outside of the classroom, consistent with what was also reported by Findlay-Thompson and Mombourquette (2014). Lange, Platt and Treglia (2000) in the early days of the flipped classroom looked at its elements as an option to cater to students from a variety of learning styles to match up learning style with method of instructional delivery, which research consistently has stated as important in order to maximize retention efforts. In this early study, two instructors taught parallel sections of the same introductory economics course. Both instructors had differing personalities and taught the class using a flipped environment. Both the students and instructors were highly favorable on the environment of the 'flipped model', regardless of personality differences. One factor that was attributed to the success in this course using the flipped model was the education provided to both the instructors and students as to how the model worked and overall expectations/structure of a flipped class before the term started.

There is always room for improvement to take a technique that has shown potential to work, such as the flipped classroom and make it better. This paper offers personal best practice of technique to integrate the principles of the flipped classroom across the curriculum to maximize its benefit and allow ample opportunity to bring additional elements of learning into the classroom. The tips presented here educate the student on the mechanics of the flipped classroom as deemed important in Lange, Platt and Treglia (2000) as well as issues presented in Findlay-Thompson and Mombourquette (2014) and Haughton and Kelly (2015) that can in both be attributed to lack of student preparedness to learn in the flipped classroom environment. This suggested best practice also supports Philips and Trainor (2014) allowing students to use flipped technology in the classroom, even when not flipped. A coordinated effort of the department faculty as a whole, and support of a Department Chair to assure students and faculty are trained to operate in this environment is needed before efforts to use a flipped classroom are introduced to a program. The tips here explore how to assure students can be 'trained' to appreciate and succeed in a flipped classroom environment through a department-coordinated effort.

PERSONAL 'TIPS TO FLIP'

The use of technology makes the successful flipped classroom most possible. Prior to class students learn what would traditionally be considered a class lecture using technology. Oftentimes, technology is a mix of videos and interactive materials recorded by the professor,

blended with additional multimedia tools that accompany most college level textbooks. Examples of this textbook provided multimedia are CengageNOW, McGraw Hill Connect, Pearson MyAccountingLab or WileyPlus. The typical flipped classroom lesson would open with a professor recorded lecture providing an overview of the topic, and discussion of key learning objectives of the lesson, as well as discussion of the most important sections of the chapter to focus on during reading. Following the professor recorded overview, students would be directed to read the chapter, and utilize the related multimedia built into the textbooks to augment reading and test understanding. This multimedia often includes videos, short-guided examples and demonstrations on key topics, followed by short quizzes to test understanding. Depending on the subject matter, additional video aids available on the Internet through YouTube or Khan Academy can also be introduced to provide additional support and alternate problem solving approaches. Students, who effectively utilized the tools provided prior to class, should by the time class begins be able to solidly perform the ‘remember and understand’ objectives of the assigned topic. The class period will often open with a short 10-15 minute question and answer period to address concerns from the pre class material, and then progress into class activities that emphasize the ability for a student to master the ability to ‘apply, analyze, evaluate and create’ based on the objectives of the topic. These objectives are not accomplished through lectures, but working either individually or in groups on problems and case studies related to the subject matter. Very often, the class time can be a variation of group work on complex homework problems from the textbook, in which the class can be asked to prepare and present solutions, or research assignments. In my tax class, I will often provide a current event related to the topic at hand, and require the students to in teams use primary tax research sources to find a solution and communicate findings in a client letter or work paper memo. Instead of the class used as a lecture by the professor, the teaching role evolves to a coaching role. The professor will walk around the room and provide one on one coaching to individuals or groups based on assignment progress. This coaching allows more classroom flexibility, as well as the ability of the professor to quickly identify where the class is struggling and adjust on a personalized basis. Following class, the students will be asked to outside of class complete the activities from class, so it is ready for submission the following class, and move on to the next topic utilizing technology provided. Some professors will also assign an additional out of class assessment to test and assure learning from the class session of the desired learning objectives.

Despite the advantages of the flipped classroom, the success rate is not always as high as it should be, and it works better in some classes than others as was shown in research such as Findlay-Thompson and Mombourquette (2014) and Haughton and Kelly (2015). Flipping the classroom involves a significant shifting of responsibility from instructor to student. For a student to be successful, they must have the motivation, drive and ability to conduct the necessary preparation before class, and the out of class expectation is significantly higher than a traditional class. From personal experience, this is not an ability that a professor can assume students have the ability to do. The introductory accounting class is not the place where one can

flip a classroom and expect instant success. As part of my faculty role at a previous institution, I have spent significant time in high school classrooms. This experience was in all types of high school, affluent suburban classrooms and inner city public school classrooms. In a large number of high school settings, students are rarely held to significant out of classroom accountability. It is very common to find school districts that have strict policies limiting homework teachers can assign per night, and even not allowing students to take textbooks out of the classroom. Policies such as this move the learning experience most exclusively inside the classroom and do not teach students the study habits necessary to be successful in a flipped classroom environment. If a student is going to be successful in a flipped classroom environment, they must first learn HOW to work in a flipped environment, and this is the job of the introductory accounting course. A successful flipped classroom experience involves a departmental effort across the accounting program, with the support of the department as a whole. Flipped classroom experiences are a program experience, not a free standing course. The introductory courses use the subject matter to TEACH students how to work in a flipped environment, so by the time the student reaches upper level courses in the program, they are properly equipped to work in a flipped classroom and maximize learning opportunity available. My personal practice is to slowly work from a partial flip to a complete flip. The next sections of this paper will discuss a strategy to flip accounting courses, starting with the introductory accounting course across the curriculum.

FLIPPING ACROSS THE PROGRAM

Learning in a flipped classroom environment is different, and not always the favorite of the student, especially in the introductory course. The easiest way for an instructor to earn a low teaching evaluation and create a line of complaints in the chair's office is to be the only instructor to flip, especially in a course that has multiple instructors over several sections. For a flipped classroom to work to its maximum benefit, not only does it have to be coordinated across all sections of a course, but it takes a clever department chair who can bring a large contingent of faculty together (often many resistant to change) and get them to buy in across a program and change personal teaching style to work in the flipped environment. Flipping the classroom in an accounting program starts with using the introductory course to teach the student how to learn in a flipped environment, and slowly increase the percentage of material flipped in the lower level courses, so by the time the student is in the major courses (e.g. Cost, Audit and Tax) the course is fully flipped and the class time most exclusively spent on application and relating the topics to current issues in the profession.

Assuming that the first introductory course focuses on financial accounting, traditionally the first three units of the course are the most important and set a foundation that spans across the rest of the accounting program, but is highly mechanical in subject matter. These topics typically include introduction to financial statements, the accounting cycle and the adjustment

process. My opinion is to not flip these topics, but teach them in a traditional format. The stress level is high enough for the introductory accounting student such that the stress of the adjustment to the flipped environment with subject matter that can be very challenging will significantly hurt a student's ability to grasp the material. Once the foundation material is delivered, then the instructor slowly flips the classroom and increases the shift with each successive topic. My personal preference is to look at each topic of the course and initially teach the topics that students find the least difficult in a flipped format, and focus on the more difficult topics using more traditional methods.

Key for the instructor is to explain to students what it means to learn in a flipped classroom environment and slowly support them as they shift to learning in this style across the term. By the end of the introductory accounting course, roughly 25-30% of the material is delivered using a flipped format, and the rest delivered using traditional methods. In each successive accounting course, the percentage of content taught in a flipped format can increase as students become more comfortable with the technique. With the right mix of collaboration between faculty in each course early in a program, a core course such as Tax or Audit is totally flipped by the time a student reaches this point.

Teaching these upper level courses in a fully flipped format can have significant advantages to learning. As a tax instructor who has taught in a flipped format, by shifting the mechanics out of the classroom using technology, class time is spent focusing on application and the impact of tax laws on public policy. For many topics, once the student has had the opportunity to watch videos and complete online assignments to demonstrate mastery of the mechanics, my class time focuses on building the important skills of conducting tax research and the communication of findings in written form, specifically completion of the work paper memo and client letter. As a recent example, Hillary Clinton and her proposed changes to the capital gains tax provides a great opportunity to expand learning of taxation of individuals. Using a flipped classroom, the instructor would through technology allow students to learn the current capital gains rules outside of class prior to the scheduled class session through videos, reading and textbook multimedia. In the flipped classroom, the first 10 minutes of class can be utilized to answer questions on current rules, but the class time can be used to break the class into teams, and have discussion of how Hillary Clinton plans to change the rules, and how these changes can impact the tax system and overall consequences to taxpayers. Following the in class exercise, teams can be asked to give presentations to generate discussion as a class. As an alternative to presentations, students can be asked to write a client letter explaining to a client specific tax strategies to manage these rule changes should they become law. This method of teaching provides a significantly higher level of learning and critical thinking than is typically found in tax classes taught using traditional methods. The ability of students to communicate in writing has been a significant concern of many firms, and conducting a tax class in a flipped format can

allow the instructor to spend a significant amount of time working with students to develop and improve these badly needed writing and communication skills.

Just because a specific segment of the course is not taught using the flipped format, this does not mean that the tools and technology used in a flipped environment should not be available for that segment of the course. Students will still prefer and utilize these resources as stated in Philips and Trainor (2014). The videos and technology of a flipped course should be available to students for all course topics as early as the introductory course, so students who are more advanced can utilize the tools for all topics and become more comfortable with the flipped environment. Additionally, flipped classroom technology can allow the instructor to teach other skills that traditionally have not been part of an accounting class to a level desired. One skill that consistently comes up as needed in all accounting classes is the ability to use Excel. As much as Excel should be used in the introductory accounting class, it often is not used as the students come into the introductory course lacking the most basic of Excel skills, and due to a full curriculum of accounting material instructors do not have the time in class to teach these skills. Use of flipped classroom technique can help to teach these skills as part of a course without eroding class time. The instructor can use Excel as part of a lecture in class when examples are presented, so students see the software and applicability. Outside of class, using basic screen capture software the instructor can record short 5-10 minute videos explaining how Excel and basic features can be used to complete assignments as illustrated in class. Students can out of class utilize these videos to self learn Excel skills and practice these skills as part of assignment completion. A common practice is to make Excel tutorials available using flipped classroom technology, and incentivize students to use Excel for assignment submissions.

CONCLUSION

The classroom is not the same as it was thirty years ago. The classroom is a radically different place than it was ten years ago. As how students learn has changed, what employers expect from graduates has also changed significantly. In the area of accounting, professional firms want students who not only have textbook knowledge, but the soft skills that make one successful as a professional in the accounting career. Professional staff at the entry level need to be strong communicators, strong critical thinkers and be analytical in nature. As the emphasis has increased on these soft skills, the CPA exam has also increased its overall expectation and increased pressure to cover technical content within classes. The flipped classroom environment can allow an instructor to use technology to move the delivery of certain technical skills outside of the classroom and create room to cover many of the additional skills demanded by firms inside the classroom. The flipped classroom can also mesh with student learning style and provide access to means that can flexibly meet a variety of student learning styles. As much as the flipped classroom can help meet the needs of firms to deliver students with the necessary

skills for success, students need to be prepared to learn in this style, and many are not. It is the upper level accounting courses that can dive deep into current events and discussion of topics to produce many desired critical thinking and communication skills, but it is the introductory courses where students learn how to be successful in a flipped classroom environment. For flipped classroom learning to work, it cannot be an effort by one instructor in one section of a course. A successful flipped classroom has to be a department or school wide effort led by Deans and Department Chairs where faculty work collaboratively to assure that students are taught the skills to learn in this format, starting with the introductory accounting course.

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