Inside-Out Classroom in a Business Course: Curriculum Template and Observations

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Abstract

Students are demanding scheduling flexibility. While online learning offers this, it eliminates the advantages of interaction with the professor and with other students. Financial Markets and Institutions is a business course whose content is focused on terms and concepts with limited calculations. After teaching the course in a traditional format in previous years, I decide to “flip” to an inside-out model, pushing course content to online presentations. This reduced meeting times by two-thirds giving students the flexibility they desire. In this hybrid format, classroom time is used for discussion and group activities. Students express satisfaction with the new format, and overall performance across the formats is similar. I observe student reactions and offer suggestions for a successful conversion. Included is a curriculum template for this new course in the inside-out format.

Keywords: flipped classroom, inside-out, pedagogy, hybrid format

JEL Classification: A22, I21, I22

1. Introduction

Universities are encouraging professors to develop online courses in response to students’ demand for flexibility in scheduling. The online format also allows the institution to increase its reach. The question remains whether this format offers the best educational experience. Our institution surveyed students and found their preference is for a hybrid approach versus a pure online class. Students want fewer classroom meetings, but they also value face-to-face time with the professor.

Currently, we offer the business course, Financial Markets and Institutions, in a traditional format. Because of scheduling conflicts, the course must be offered at eight o’clock in the morning. The course is listed as a typical Monday, Wednesday, and Friday class with a fifty minute time period allotted for instruction. This is a very unpopular schedule for undergraduate students!

Financial Markets and Institutions may be taught in the economics or the finance department. In our case, the course is listed as a finance course. After teaching the course in a traditional format, I decide to restructure the course using a hybrid approach. My experience with the material convinced me that students could learn most concepts through online lectures. This allowed me to “flip” the course to an inside-out model. Setting up the class with a more flexible schedule (meeting only one time per week) bolstered enrollment.

Since this was the first time the course had been offered in any setting other than the traditional one, I design a curriculum for a hybrid format, incorporating the concepts of the inside-out classroom. While Flanagan (2012) found the traditional format led to better student performance in a business statistics class, Estelami (2012) says that optimal format is dependent on the specific course.
Financial Markets and Institutions has limited calculations but is a course that requires students to grasp some complicated economic concepts such as the creation of money. While I believed many terms and basic ideas could be taught in an online format, I also wanted classroom time with students to make sure they understood the material.

The “inside-out” approach is gaining in popularity in K-12, but it is not as common at the university level. Goodwin and Miller (2013) note the lack of research to support the inside-out classroom but still find anecdotal evidence of improvements in student performance. My goal was to observe student response, satisfaction, and performance with the change in format.

I design the course curriculum so that content is delivered in an online format while classroom time is used for discussion and group activities. This “flipped” classroom requires more effort from the professor on the initial set-up but can be more rewarding. Professors must give up the role of lecturer and assume the role of a learning guide. Professors must also recognize the benefit of group work in the learning process. The inside-out classroom promotes professor-to-student learning, student-to-student learning, and individual learning. The result is a schedule that is appealing to students and an experience that enhances typical classroom instruction.

2. Curriculum Overview

The objectives, as listed in my syllabus, of the Financial Markets and Institutions class are:

1. Have an understanding of the role of money and financial instruments.
2. Have a basic understanding of financial markets and financial intermediaries.
3. Be familiar with the role of the central bank and the tools of monetary policy.
4. Be able to put the current economic and financial environment in proper context.
5. Have a working understanding of the current challenges faced by financial institutions and the central bank.

2.1 Text

Since this is an inside-out class, the choice of text is critical. The text should be designed for undergraduate students and should offer clear language and good examples. In addition, it should have accompanying tools that can be used by the professor. Currently, I use Money, Banking, and Financial Markets by Cecchetti. I have used this text for the past two years in a standard format, so I was comfortable with the conversion. The PowerPoints with the Cecchetti text are excellent.

2.2 Online Lectures

Each week, I record a lecture using Blackboard Collaborate. I use the Cecchetti PowerPoints for each chapter, but I add text to slides to expand explanations that would normally occur in the classroom. Professors should make each slide self-explanatory. Typical text PowerPoints are designed as starting points or bullet points for lectures. In an online lecture, the slides should be more detailed. The lecture is posted to the course website. A weekly chapter quiz based on the lecture also occurs online. The quizzes are composed entirely of objective questions. Weekly quizzes ensure students stay current with reading material.

2.3 Article Reviews

In addition, students must review an article or video related to the chapter material. For the chapter on types and uses of money, I post a video on the stone money on the Island of Yap. Some postings I will use again in future courses, but I prefer to find current material. For instance, for the chapter on financial intermediaries, I post an article on payday lenders. This is an issue currently being debated in our State legislature.

When studying insurance, students read articles about insurance coverage and issues after Hurricane Katrina. Many of our students could relate to this event, so it made the study of insurance more interesting.

Whenever possible, I think it’s important to use current materials. Students then see concepts come to life in real time events. Each week, a written review of the article or video must be submitted.

2.4 Current Event Quizzes

A weekly current events quiz is posted online. Most come from The Wall Street Journal but can come from other sources.
This encourages students to pay attention to current business news and helps them with the application of classroom concepts. This is a requirement of every finance course I teach. In my evaluations, students consistently express positive feedback about this exercise. While most undergraduate students don’t read business news or pay attention to current events, I find they are interested when challenged to do so. Connecting this exercise to material from the text reinforces those concepts.

2.5 In-Class Activities

I designed in-class activities to show the application of class concepts in a practical way. These offer them practical knowledge about accessing financial markets and an understanding of the cost of money through various channels.

About half the time, that activity was a game designed to reinforce the weekly material. Most occur in groups, and the competitive nature of these students pushes them to learn new ideas without realizing they are doing so. Most games are designed so that the group must use laptops and notebooks to research items. Prizes are awarded to winning groups. This could be extra points on an exam or a gift card to a fast food restaurant.

I include examples of some of these activities in the appendices. We played a “family game” centered on economic choices and budgeting. Life events were drawn that altered the results of choices during the course of the game. Other activities included a foreign exchange game and an inflation game.

For the other part of our classroom time, there are discussions about current events, their weekly article reviews, and important issues. By giving up on standard lectures with lists, terms, and concepts, I can concentrate on developing their critical thinking skills. Some Wednesdays were declared “Controversial Wednesday,” and I encouraged debate on topics such as the minimum wage, online lenders, and tax policy. These discussions were often quite lively!

2.6 Other Activities

I also employ online discussions. I set these up as a “Forum” on the course website. Students who are hesitant to speak out in class will respond online. I was surprised by the response from students. The discussion on the propriety of payday lenders online got quite heated! My goal was to encourage students to think about the topic and converse among themselves. I found, that for some students, that is best done in this format.

2.7 Exams

Three regular exams occurred during the semester. These always occurred on Friday and were given in the classroom. This resulted in an extra meeting time during exam week. This schedule allowed me to recruit students otherwise hesitant about an eight o’clock class. Show up once a week on Wednesday for fifteen weeks for lecture. Show up three Fridays during the semester for exams. Everything else happened on their own schedule. The final was also given in the classroom.

Questions from the chapter quizzes appeared on the semester exams, but I also included questions about the article reviews and current events. Exam questions were expanded to include short answer and calculation questions. Students were cautioned that the regular exams would be more rigorous than the weekly quizzes.

The decision to give all exams in the classroom was due to concerns about academic integrity. Online proctoring of exams could eliminate this need.

2.8 Schedule

The course is on a Monday, Wednesday, Friday schedule, with class meetings lasting fifty minutes. Regular classroom instruction occurs only on Wednesday. All chapter quizzes must be complete by class time. I assume that students know and understand the concepts before coming to class. This is the “inside out” concept, with basic instruction occurring online. I was pleasantly surprised to find that students came to class prepared. This is not my experience with a traditional class, which encourages students to show up for class with no prior knowledge of the material. While students may not understand all concepts upon entering class, at least they have been exposed to the material. Classroom time may be used to explain more difficult concepts.

Additionally, the inside-out classroom allows me to expand the course to cover issues that have an impact on them. It allows me to make the classroom experience interactive instead of just one-way lectures. Introducing news items and issues that show them the application of the concepts from the text is invaluable. All article reviews and current event quizzes were also due by class time on Wednesday.
For the professor, such a format can be time consuming, especially for the first time. I had to stick to a strict schedule of posting of online content. Every Friday, I edited the text PowerPoint and recorded the lecture. I also posted the chapter quiz for the week on that same day. Articles and videos were selected and posted on Friday. By Monday, the current events quiz had to be posted. It was important for me to set the schedule on the first day of the semester and keep it consistent from week to week so that students knew what to expect.

3. Observations
Students expressed satisfaction with the new format. Student evaluations were similar to the traditional format. My observations were that the students were more engaged in an inside-out version of the course. While the preparation was intense, I found I was more satisfied with the course, as well. Students learned the material, but, more than that, we all had more fun!

3.1 Attendance
The early time slot was more palatable to students when they only had to meet one time per week. Students were less likely to miss a once a week class than one that meets three times per week. The requirement that exams be taken in the classroom was not a problem for students.

3.2 Assignments
Students had a clear understanding of the schedule. They completed assignments per the schedule and came to class prepared. As we engaged in group activities, it was apparent that they had studied the material and understood most concepts. When there was confusion about certain concepts, I used classroom time to expand their knowledge in a certain area.

3.3 Group Discussion and Activities
Discussions and group activities during the classroom time were lively. They seemed to really enjoy the games, and they were engaged when it was time for discussion. Students learned from each other as they participated in activities. Many times, my role was to simply circulate throughout the room and interject an occasional idea.
Online discussions were lively. This was my biggest surprise. The topic is critical to the success, but many students are more comfortable responding via keyboard than in a classroom discussion.

3.4 Overall Performance
The students in the inside-out version of Financial Markets and Institutions performed similarly to the traditional format. I noted no difference in scores and student evaluations. The difference in the inside-out version was the inclusion of more current events and applications of concepts. The result was a more valuable and pleasant experience.

Overall, the experience was a positive one for me, as well. Students learned the material, as evidenced by their performance on exams. They engaged in discussions. They came to class prepared. Most importantly, they actually showed up at eight in the morning!

4. Conclusions
Online education offers many benefits. Students get the flexibility in scheduling they seek, and universities expand their reach to students who could not otherwise physically attend traditional classes. In this pursuit, though, we must always focus on the educational experience for both the student and the professor. Like many professors, I thrive in a classroom setting. Interaction with students is important to my experience. Students are telling us that such interaction is important to them, as well. The hybrid format seems to address both issues. Limiting actual classroom time appeals to students, but the pure online experience is less appealing.

The inside-out classroom forces students to prepare before coming to class. Classroom time can then be “flipped” so that students are engaging in activities that create learning from student to student as well as professor to student. Professors should understand the commitment to such an endeavor can be time consuming but is also rewarding. The hybrid format is not for every course, though. In my experience, Financial Markets and Institutions is a good fit for this format and style. A readable text with good accompanying instructional materials is key. Combining this with articles and video of current events that reinforce the concepts is another important element. Professors who decide to convert should develop a clear schedule and stick to it. Conversion is a commitment of time and energy, but the result is an enhanced educational experience for both student and professor.
References


Appendix A. The Family Game. Students are placed in groups or “families” and must make economic choices. Life events are drawn which may affect the economic benefit of the choices.

You are a member of a family with total net monthly income of $4,000. Below is the set of monthly expenses each family will pay:

- Groceries $600
- Utilities $300
- Clothing $200
- Entertainment $200
- Misc. Items $300

In addition, you may choose the following options:

1. House Purchase
   a. $125,000 home, financing 80% ($100,000)
      1. 15 year mortgage at 3% with a monthly payment of $690
      2. 30 year mortgage at 4% with a monthly payment of $477
   b. $250,000 home, financing 80% ($200,000)
      1. 15 year mortgage at 3% with a monthly payment of $1381
      2. 30 year mortgage at 4% with a monthly payment of $955

2. Car Purchase
   a. Toyota Camry for $15,000, financing at 6% for 5 years with a payment of $290 per month
   b. Lexus for $35,000, financing at 6% for 5 years with a payment of $677 per month

3. Insurance
   a. Car Insurance
      1. $200 per month for Camry
      2. $400 per month for Lexus
   b. House Insurance
      1. $200 per month for $125,000 house
      2. $400 per month for $250,000 house
   c. Life Insurance
      1. $50,000 policy for $100 per month
      2. $100,000 policy for $200 per month

4. Investments
   a. Savings Account paying 0.25%
   b. Certificate of Deposit paying 2%
   c. Bond paying 4%
   d. Dividend paying stock
   e. Stock of a start-up company

You also have access to a credit card account. The interest rate on the account is 15%. You have an unlimited credit line.

The length of the “game” is 10 years. Within that 10 years, ANYthing can happen!
Appendix B. Foreign Exchange Game. Students are placed in groups and must answer questions related to currency exchange.

1. I am a Chinese student at Mississippi College. I want to order the latest iPad. How much will this cost me in renminbi?
2. I am living in Italy for the semester, and I want to visit England for a weekend. According to my friends, I’ll need 250 pounds for the weekend. How many euros is this?
3. I am going to the Olympics! I really want to attend some of the ice dancing events. In US dollars, each ticket is $95. How much will this be in rubles?
4. My family is planning to take a cruise to Mexico. We would like to visit a particular historical site. According to the website, the cost of entry is 200 pesos. How much is that in US dollars?
5. I am visiting Japan and plan on attending a concert while there. The cost of each ticket is 12,650 yen. This sounds VERY expensive! How much is each ticket in US dollars?
6. I am living in Germany, but I want to purchase the men’s Casual Camo Jacket from The Gap. How many euros will this cost me?
7. I want to take a trip to Ireland. I found a tour group called Vagabond. I want to take the trip called “12 Day Giant Irish Adventure.” The price on the website is in euros. How much (on a shared basis) will this tour cost in US dollars for each traveler?
8. My family has Danish origins. Since Ireland is close to Denmark, I plan to make the short trip over to investigate my family roots. I discover that the standard hotel rate in Denmark is $1250 krone. How much is this in US dollars?
9. I’ll be spending my vacation in Canada this year. I’ll drive up and take a ferry across from Washington state to Canada. The cost of ferry tickets is $35 Canadian dollars. How much is this in US dollars?
10. I have 6000 yuan in my bank account to prepare for studying abroad in the US. How much is this in US dollars?

Appendix C. Inflation Game. Students are placed in groups and must answer questions about inflation.

1. We measure inflation by tracking the CPI. How many families are surveyed to find the basket of goods to measure?
2. Which government agency is charged with calculating and tracking inflation?
3. When did the government first start tracking inflation?
4. What is the average inflation rate from the point of the first calculations until 2012?
5. What was the average inflation rate for the 1990s?
6. What was the average inflation rate for the 2000s?
7. You live in Jackson, MS, and earn $40,000 per year. You are moving to the metro Atlanta area. How must your salary be in order to maintain the same standard of living?
8. In 1980, you have a $100 bill in your pocket. What is that bill worth in 2012?
9. One CPI-U calculation excludes 2 categories of consumer goods. What are those 2 categories?
10. What was the average inflation rate for 2012?
11. What is the US Prime interest rate for 2012?
12. What is the average inflation rate for 2009?
13. What is the average inflation rate for 1980?
14. What is the US Prime interest rate for 1980?
15. In 1800, how much did it cost to buy a pound of coffee?
16. In 2012, how much did it cost to buy a pound of coffee (Starbucks)?
17. In 1950, how much did it cost to buy a pound of coffee?
18. How much did a Chevy Corvette cost in 1950?
19. How much does a 2012 Chevy Corvette coupe cost?
20. In 1978, what was the cost of a six pack of beer?
21. In 2012, what was the cost of a six pack of beer?
22. In 1978, how much was the cost of a movie ticket?
23. In 2012, how much was the cost of a movie ticket?