Flipping the lecture: A 5-minute teaching model
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Where This Technique is Used

- All Undergraduate Students in the Daniels College of Business are required to take 3 courses on “Analytics”
- This method has been used in the first 2 courses of the 3 course sequence
- Few of the students want to study Analytics for their major, but all have to be there
- I have used this technique for approximately 10 sections
- Others in my department are starting to use this technique as well
- The course material is both theoretical and applied/technical.

How is this Flipped

One Class Meeting Per Week
Class meets for about 2 hours per week, instead of the traditional 4

Outside Class Responsibilities
Students are expected to come to class having already “done” a lot of the learning of the week’s topics

Online Lectures – Screen Captures
The 5 minute lectures are the key part of the outside of class responsibilities – Sometimes as many as 15 of them, including relatively easy, detailed examples

Other Pre-Class Activities
Students are expected to do homework and reading – They are also expected to take a quiz before class time

In Class is Different
So far this sounds like hybrid learning (it is) – they key to making it flipped as well is the way we use class time

Hard, Hands on Problems in Class
No real lecture in class – Hard problems are given to students the build on the examples from the online lectures and homework

Group work and Immediate Feedback
Students can work together or on their own – either way they get immediate feedback when they get stuck

Re-organize the 2 weekly lectures
- Almost all content moves to online lecture for the week (PowerPoint and Excel examples, mostly)
- Shorter in class PowerPoint created to act as guide for in class activities

Think hard about what goes online and what to do in class
- Information Delivery goes online
- Skill practice goes online
- Easy examples go online
- Designed for students to work at own pace
- Class time deadline for completion of quizzes

Instructor Role – My Experience

- Opportunities for group work go in class
- Problem challenges that lead to coaching
- Hope for chances for students to get stuck and receive immediate feedback
- Think teachable moment

Recording Tips

- Don’t be perfect
- Get a good microphone
- Budget your time
- Seek feedback
- Convey Excitement (consider standing while recording)

Instructor Hurdles

- Develop comfort with recording and posting lectures
- Work hard to break up the activities between online and in class
- Think about assessment from the beginning (I test on a few Fridays a quarter)
- Be organized (you have to manage a lot of links (to videos), documents, and due dates

Blackboard Data Tells All

Most students access the material during the day (at around the same time as the class), but information happens on their schedule

Online Lecture Benefits

- Content delivery at student pace
- Fewer “deer in headlights”
- Fewer “Facebook faces”
- Students are responsible for learning (they may not like this)
- Class time is used better

Self-Directed Students

- Students manage learning on their time at their pace
- Students held accountable with weekly (self graded) quizzes
- Technical examples can be watched over and over as needed for mastery
- Project based work helps re-enforce the materials learned in class

By The Numbers

1. 15 to 20 sections of each class per year
2. 30 to 40 students per section
3. 1 book for all 3 courses (compiled from 3 books)
4. Around 500 students per year
5. Many students are freshmen
6. 25% or so of this year’s Analytics I and II sections were (are) taught this way