MKTG/STAT-476: The Tech-Integrated Classroom from a Student’s Perspective

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Why MKTG/STAT-476?

• Applied Probability Models in Marketing
• Large lecture class
• Average 3.8 Course Quality
• “Students called MKTG 476 ‘the best course at Wharton,’ ‘the best course I have taken at any level in my academic career,’ and ‘a life-changing course.’” –Penn Course Review Comments, Spring 2012

• What contributes to this course being so exceptional? Technology Integration!
Tech-Integrated Lecture Experience

- Interactive, investigation/discovery-based learning
- Based in guided discussion and brainstorming
Each Lecture as a Packaged Set

- Each lecture has its own Canvas page with comprehensive materials and optional supplementary readings
- Complete with slide decks and full recordings!
Speaking of Recorded Lectures...

• No need to take meticulous notes, freeing up students to pay closer attention
• Allows for more genuine engagement
• Lets students go back and find “that one thing” someone said that they can’t remember
• For complicated ideas, lets students re-watch explanations as needed

For instance, what if I...
Can’t Remember the Expected Value of the Exponential-Gamma Distribution?
Want to See the Time Dr. Fader’s Wife Stole His Keys Off His Desk?
Didn’t Quite Understand the Intuition Behind Empirical Bayes’ Methods the First Time Around?

Bayes Theorem

- The prior distribution $g(p)$ captures the possible values $p$ can take on, prior to collecting any information about the specific individual.
- The posterior distribution $g(p|x)$ is the conditional distribution of $p$, given the observed data $x$. It represents our updated opinion about the possible values $p$ can take on, now that we have some information $x$ about the specific individual.
- According to Bayes’ theorem:

$$g(p|x) = \frac{f(x|p)g(p)}{\int f(x|p)g(p)dp}$$

$$P(M|x) = \frac{\int (M|p)x^p(1-p)^{1-x} \frac{p^a(1-p)^b}{\text{B}(a,b)} dp}{\int \frac{p^a(1-p)^b}{\text{B}(a,b)} dp}$$

$$E[M|x] = \text{conditional expectation}$$
Want to See the Time Dr. Fader’s Son Smashed a Cake in His Face?
Communication

- Canvas discussion threads for course-related questions, regularly monitored by both instructors and classmates
But What About Grading?

• One word: WHOOPPEE (Wharton Online Ordinal Peer Performance Evaluation Engine)

• Anonymous/double-blind peer grading, but with accountability

• Each student reads and ranks five papers

• Professor and TAs contribute to grading through the same ranking system, improving reliability
What is This Like From a Student Perspective?

- More Reliability
- Getting to be a part of the grading process
- Learning from seeing others’ work
- Learning how to distinguish good from poor quality work
So What Makes a Good Course Great?

For MKTG/STAT-476, it’s:

• Extensive recording and documentation of course materials for accessibility
  • This allows real learning rather than frantic note-taking to happen in-class
  • Can be referred to even after the course is over
• Investigative, engaging lectures based on real-time problem-solving
• Outside-of-class learning facilitated by peer grading and discussion