Visualizing Lecture Capture Usage: A Learning Analytics Case Study

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... not required, just interesting

Find and skim Canada criminal code sections 319 (hate crimes), 327 (telecom devices), 342 (credit cards and esp. 342.1), 372 (false messages), 402 & 403 (identity theft), [while you're there check out 404], and 430.1.1 [while you're there check out 432], on http://laws.justice.gc.ca/

- Watch the video of Frank Abagnale speaking about his life (http://video.google.com/ videoplay?docid=-6271800786378394176#)
Chapter 2: Marginal Cost, Marginal Revenue


(5) Suppose \( C(q) = 1000 + 50q + 0.2q^2 \),
   selling price \( \geq \$55 \), \( 90 \leq q \leq 120 \).
   Currently, they are manufacturing 100 units,
   want to decide whether to increase production or not?

\( C(100) = 1000 + 50 \cdot 100 + 0.2 \cdot (100)^2 \)

\( \frac{\text{Average cost}}{100} = \frac{5000}{100} = 50 \leq 80 \)

Since the average cost is producing an item (when 100 units).
interest 1: rewatching behaviour

• motivated by a correlative link between re-reading discussion forum messages and academic performance
  – does this exist in lecture capture too?
  – how different students review content may offer benefit for identifying learning style
the regular rewatcher

Student: Orson Video: 2758138
the engaged rewatcher
Student: William Video: 1782956
temporal viewership

• want to see how learners use a system throughout the term
• motivated by previous investigation that showed correlation between regular viewership and high achievement
• but do students just watch the newest lecture, or are they watching older content?
• interested in seeing how different identifiable groups of learners compare with their usage of the system
• do high achieving learners (87.5% or higher) use lecture capture differently than poorly achieving learners (under 62.5% but above 50%) 
• the story is...complex
Comparison of Cohorts by Mark

Viewership

Concatenated Video Time

Red, 85%+
Blue, 65%–
• thus far this has been data investigation only, no interaction with instructors or instructional designers
  – rewatching is a tough metric to define, the visualizations are a start towards clarifying this
  – heatmaps tell an interesting story, and are likely of interest to instructors
  – unclear how to be convey the difference between groups
    • interested in using this visualization for ESL groups