The Question

Sources of knowledge
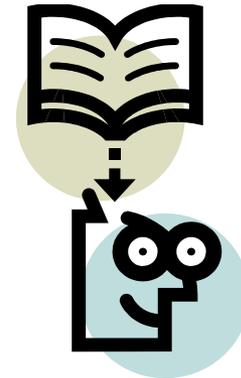
Consumers of Knowledge

Knowledge →

← Tuition

(Faculty)

(Students)

(Partners in learning)

Will the future contain as many universities and faculty as we have now, all delivering knowledge in traditional classroom settings? What if NOT?

The Landscape of Higher Ed is Changing

Stanford President and founder of Khan academy

- Changing the economics of education

  http://online.wsj.com/article/SB1000142405270230364010457744051336999427 8.html?KEYWORDS=changing+economics+education

Online education is becoming a business

- http://chronicle.com/article/Revenge-of-the-Underpaid/131919/
  - Udemy (http://www.udemy.com/)
- BBC article
  - http://www.bbc.co.uk/news/business-18191589
- edX ($60m) [Harvard]
  - http://www.edxonline.org/
- Coursera ($16m) [Stanford, Princeton, UMich, Penn, +12 more signed up recently +17 more signed up September 19th].
  - https://www.coursera.org/#about

Possible Responses

- Our current methods have been successful for hundreds of years and online is not yet proven
  - In reality, we have changed (in TCOB, we went from writing on the board and students copying it down, to providing students with PPT note shells and having them write down our verbal "linkages"). The next logical step in my view is to automate lectures (use recordings) and spend in-class time doing real-world experiential learning.
- Wait to see how this "train" goes and hop on board when it's rolling
  - Risky. The train is leaving the station now (see previous slide). We need to be concerned with our competitiveness.
- Get on the train now!

How do we get on board? Recognize the common denominator is recorded lectures

- President (of Stanford) Hennessy said "We started with the view that the large lecture no longer works for this generation of students. So the whole flip classroom idea is something that's appealing. That simply means you do the lecture online and use the classroom to do something that's more interactive and more engaging."

- Pearson e-Newsletter: http://www.pearsonlearningsolutions.com/academic-executives/blog/2012/05/29/what%E2%80%99s-all-this-talk-about-flipping/

- One "competitor" is Yale's Robert Shiller,
  - http://oyc.yale.edu/economics

Who would students rather learn from? If we offer the same "talking head" product with note slides, I think we lose.

What's our value added?

- In the classroom, we can interact with students in a way that is impossible with a simple recording.

  – Collaborate (Elluminate) is possible, but the interaction is still weaker. There are limits to the number of students one can "view" at a time in Collaborate.

  – UNC tried a completely online executive MBA. It was unsuccessful. They now include (with the recordings) both face-to-face online interactions and face-to-face *in person immersion experiences*.

  – UF has one of the top two online MBA programs, and you do visit campus (at least once per four month term, for at least a weekend)

  – Indiana includes two full-week, on-site, campus visits.

<u>What infrastructure do we need to get started?</u>

- A computer with a mic (and webcam?) + software for recording
- ITS knows about the software
- UICapture/Panopto is available through UI-wide ITS
- Camtasia is my preferred approach. You need to buy a license.
- Both allow the minimum of powerpoint slides with a voice-over.

Specifics: implement "recordings-based-learning" plus our value-added activities?

- Camtasia or Panopto recordings of slides (and/or spreadsheets, word docs, web browsing, etc.) with a voice-over and sometimes webcam.

  - These can be used to deliver the type of "lectures" that we typically offer in the classroom. They're not interactive.

- OR, simply borrow (they're free) other faculties' recordings where available (and where they fit).

Then, supplement the recordings with

- Interactive in-class, real-world, real-time, exercises.

In-Class exercises

- Tailor to your own needs.
- Learning-by-doing
- Use real-time real-world examples
  - In finance, I have students "price" a recent merger, construct a cost of capital for a new division of a company, evaluate the viability of a new business-class only jet service across the Atlantic, …

Benefits of recordings

- Can be listened to as many times as the student needs to
  - Reinforces learning at students' own pace
- Emphasizes points in a way that students' reading of textbooks often doesn't
- Recognizes that different students learn in different ways and at different times of the day
- Allows more time to be spent in class on process and logic and intuition delivery. This is where (in my 20 years' experience teaching) students require the most support
  - Critical for delivery of material during short or condensed course formats
  - HKG (2 weekends), MBA-PM (5 weeks, 4 weekends), EMBA (8 weeks)

Benefits of in-class, real-world, real-time exercises

- Experiential learning!
  - This is what employers want students to do when they arrive on the job
  - The real world is messy (not like cases). Getting the right data and using it to make the right decisions is difficult (the first part is often overlooked)
  - Allows students to make mistakes AND LEARN FROM THEM in a safe environment
- Delivers another "form" of learning (not all students learn the same way)
- Delivers another "layer of the onion"
- Provides the same underlying theory reinforcement, but in a different context (if students don't see it "generally", they might see it "specifically"
- Allows students to learn from each other (sometimes easier than learning from faculty)

More benefits of in-class exercises

- Feedback: particularly with MBAs, their work experiences often provide great examples of the class topic.
  - I find that students are more likely to listen attentively and engage in the thinking process, when a fellow student makes a comment related to the topic
- Student participation is often difficult to generate, but the group-work orientation of in-class exercises helps to draw out even the most reluctant students
  - It's less daunting to say something to a few fellow students than to a whole class
  - It's less daunting to ask a question quietly of the professor when I visit the group than to ask it in front of the whole class
  - I find it much easier to make eye contact with each student of a small group than to do so when I face the whole class at once

Good news: We already do a version of this in many areas
Here are a few examples

- Our first- and second-year textbooks have a rich, on-line learning environment that combines video segments of people communicating in French (an ongoing soap opera kind of thing), computer graded and open ended exercises that test comprehension, audio input (w/o video)with student oral responses being recorded, etc., for students to practice correct pronunciation. What this does is allow us to have students take more control over their learning and to do this learning outside the classroom. We still teach the structures of the language indirectly, by engaging students in increasingly more complex conversation patterns and by modeling the grammar rather than teaching it overtly. But vocabulary learning, modeling of good French, etc. largely takes place at home using this interactive environment.

- The idea is to prepare students outside the classroom for use of French in the classroom. To get them to use French we give them roles to play, interviews to conduct, and use what we call info-gap activities, where people have different sets of information they must share in order to accomplish a task.

Another example (TCOB), plus a lesson learned

- Wealth Management: started with an in-person session, then we had 7 online sessions, then the last class was in-person

- The recorded lectures worked great – I received many comments about how useful it was to have the recordings in 20-30 minute segments that they could work into their schedules. The online class meeting (using Collaborate) was less successful – I was trying to use the microphones and the technology just isn't there yet. What I learned was that all these students do texting as a standard way of communicating, so once I gave up on the microphones and switched to the chat box (where they type in their comments) it worked reasonably well.

A third perspective (CCOM)

- Med school online courses. Some of the better ones (for ex. Biostatistics) were actually interactive (set at different times and the teacher was online and you could get online and interact with them. If you couldn't get online to interact, the lecture was recorded and you could observe how the lecture and questions and answers developed.

- Another class… Posted powerpoint slides and readings. Didn't force you to read, but you were required to post questions and thoughts regarding the topic. Highlights the need for accountability – force students to engage.

- Biggest complaint regarding online courses is when the recorded lectures sound very good and you really want to be in the room with the professor.

Benefits to faculty

- More light bulb moments
- Recordings don't change too frequently (they're often about underlying principles that don't change)
- Prep now involves finding new examples for in-class exercise
  - Current events in your field can help you see new developments that may yield a research topic
- Time spent in class on real world topics sometimes leads the faculty member (at least me) to a question that deserves research – helps research agendas

Summary and conclusions

- Landscape is changing – eventually we need to adapt
- Recordings are "table stakes"
- Contribution is experiential learning
  - We need to have it not just in a few (or even most) TCOB classes; we need them across all campus units
  - This can be a selling point (I think nationally, especially among undergraduate programs) "
  - May eventually help (I hope sooner rather than later) with "assurance of learning" requirements