

# Columbia University Paths to Online Learning

## Online Learning Task Force

October 18, 2012

Sharyn O'Halloran  
George Blumenthal Professor of Political Economy  
Professor of International and Public Affairs

Chair, Executive Committee of the University Senate



# Game Is Changing

- Recent ripening of technological and social trends:
  - Online learning now practical and acceptable
- Since September 2011:
  - Stanford offering dozens classes to 1.6 million students
  - Two spinoffs extending to teachers elsewhere
  - MITx (now Edx) offering class to 100,000 students
- Emerging model:
  - Massively Open Online Courses (MOOC)
  - Free content+grading; \$30 for certificate of completion

# The New Landscape

## □ Technological Assets:

- Flipped classroom
  - Lecture content online
  - Classroom experience stress practical application
- Scalable teaching

## □ Columbia needs to be in the space to:

- Maintain brand
- Learn how to compete in a market where content is free, including:
  - Market segmentation (degree vs. non-degree)
  - Tiered pricing
  - Residential vs. non-residential mix

# Considerations for platform

- Scalability
- Flipping capability
- Criteria:
  - Non-binding
  - Low overhead
  - Not cannibalizing
  - In good company
  - Income generating

# Comparison Chart

## Provider

### Features

### Udacity

### Coursera

### Pearson

### EDx

### Course Content

video

√

√

√

√

Assignments

√

√

√

√

Discussion forum

√

√

√

√

Social networking

–

Q4 2012

√

–

Voting of questions

stack overflow

stack overflow

–

stack overflow

Multiple-answer

√

√

√

√

Computer-code auto-grading

√

√

–

√

Peer-assessment autograding

–

√

–

–

Instructor-grade

as override

as override

√

as override

### Scalability

√

√

TA resources depend on class size

√

### Track record

Courses done and available (+starting)

2 (+4)

dozens

67

(+1)

enrollments

90,000

1,600,000

9,000,000

96,000

### Model vis-a-vis universities

Becoming its own university

Collaboration with university

Software as a service

Belongs to MIT/Harvard

Remote vs. On-campus

Segmentable to different levels of on- and off-campus

Designed for campus-sized class

online; based on and in parallel to in-class

Exporting content

N/A

videos or XML objects

not clear

N/A

### Hosting

cloud

cloud

cloud

cloud

### Requirements

–

–

GoogleApps

–

# Options

- Partner with existing platform
  - Run a pilot with Coursera; and/or
  - Partner with Edx (not yet an option)
  
- Develop our own

# Pilot with Coursera and/or edX

## □ Pluses

- + Gaining relevant experience
- + Joining the leading pack
- + Can flip classroom for resident students

## □ Minuses

- Content is released (as in a published book)
- Coursera gets ~90% of \$30 tuition vs. edX subscription
- May undercut current distance programs

# Developing a Columbia Solution

## □ Pluses

- + Customized to our needs
- + No lock in
- + Own IP and content

## □ Minuses

- Upfront and maintenance costs
- Development time
- Experience with Fathom is a cautionary tale



# Next Steps

- ❑ Explore interim pilot program with Coursera/edX
  - Makes sense if:
    - + Schools can adopt flip model
    - + Columbia can package content for degree students
    - + Net revenue covers development costs
- ❑ Expand capacity to develop online course content
  - Share experience and investment across the university
  - Build technology studios and infrastructure to support units'
  - Archive and manage content to be repurposed across institution and courses

# Next Steps

## □ Develop Governing Principals

1. **No lock-in** to current technology
2. **Focus on content provision** not service provision
  - i.e., we should not develop our own MOCCOs
3. **Economic viable** business model
  - Course offerings should be self-sustaining -- cover development costs.
4. **Transparent and clear guidelines** for course selection and areas of investment
5. **Faculty governance** should be university-wide and incorporate existing university-wide decision making bodies
  - e.g. include representatives from the Senate Online Learning and Education committees.

# Next Steps

- ❑ Explore link between Global Centers and various distance/online learning models
  - Bundling of the Online Learning and Global Centers
  - Brings in new audience and donor base
- ❑ Online Learning Task Force
  - University-wide group, including Sree Sreenivasan
  - Focusing on three central themes:
    - Technology
    - Pedagogy
    - Audience
- ❑ Report in Spring