Lifelong Learning on the Web

Presentation to
OSHER Lifelong Learning Institute
Social Media and Digital Technology

July 1, 2013

Douglas H. Fisher
Director of the Vanderbilt Institute for Digital Learning
Vanderbilt University

Outline

- Motivations for online learning
- Availability of (free) online learning materials
- Technological and Pedagogical Theory
  - Communities of Learners (Global and Local)
  - Personalization and Humanization through Technology
- Some history and proposals

Overview Videos

Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU

Salman Khan: http://www.youtube.com/watch?v=nTFEUsudhfs

Peter Norvig: http://www.youtube.com/watch?v=tYclUdcsdeo

(Free) Online Education Resources

COURSERA https://class.coursera.org/

EdX https://www.edx.org

Udacity http://www.udacity.com

Udemy http://www.udemy.com

Khan Academy http://www.khanacademy.org

- Motivations for online learning

Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU (0-2:48)

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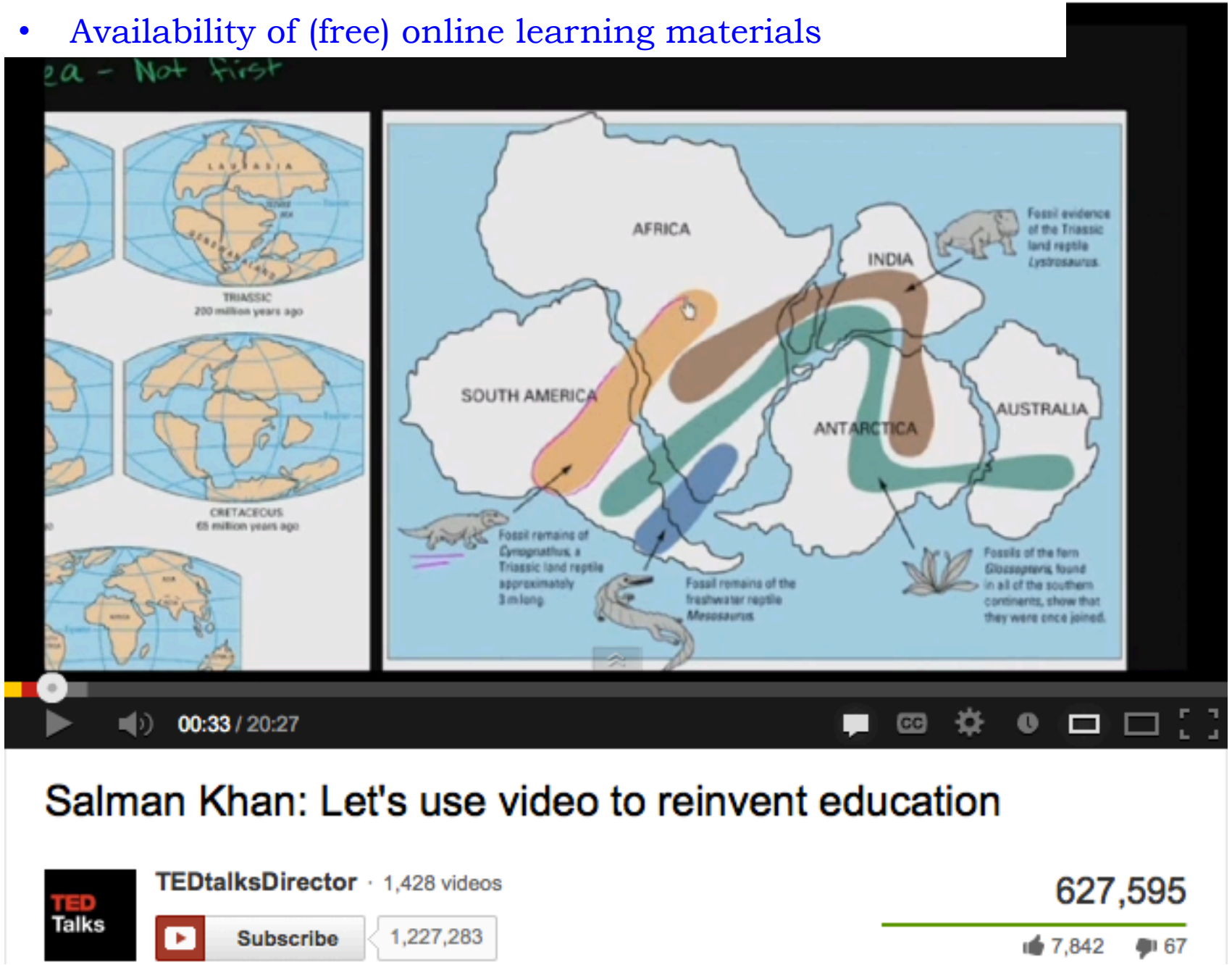
- Availability of (free) online learning materials



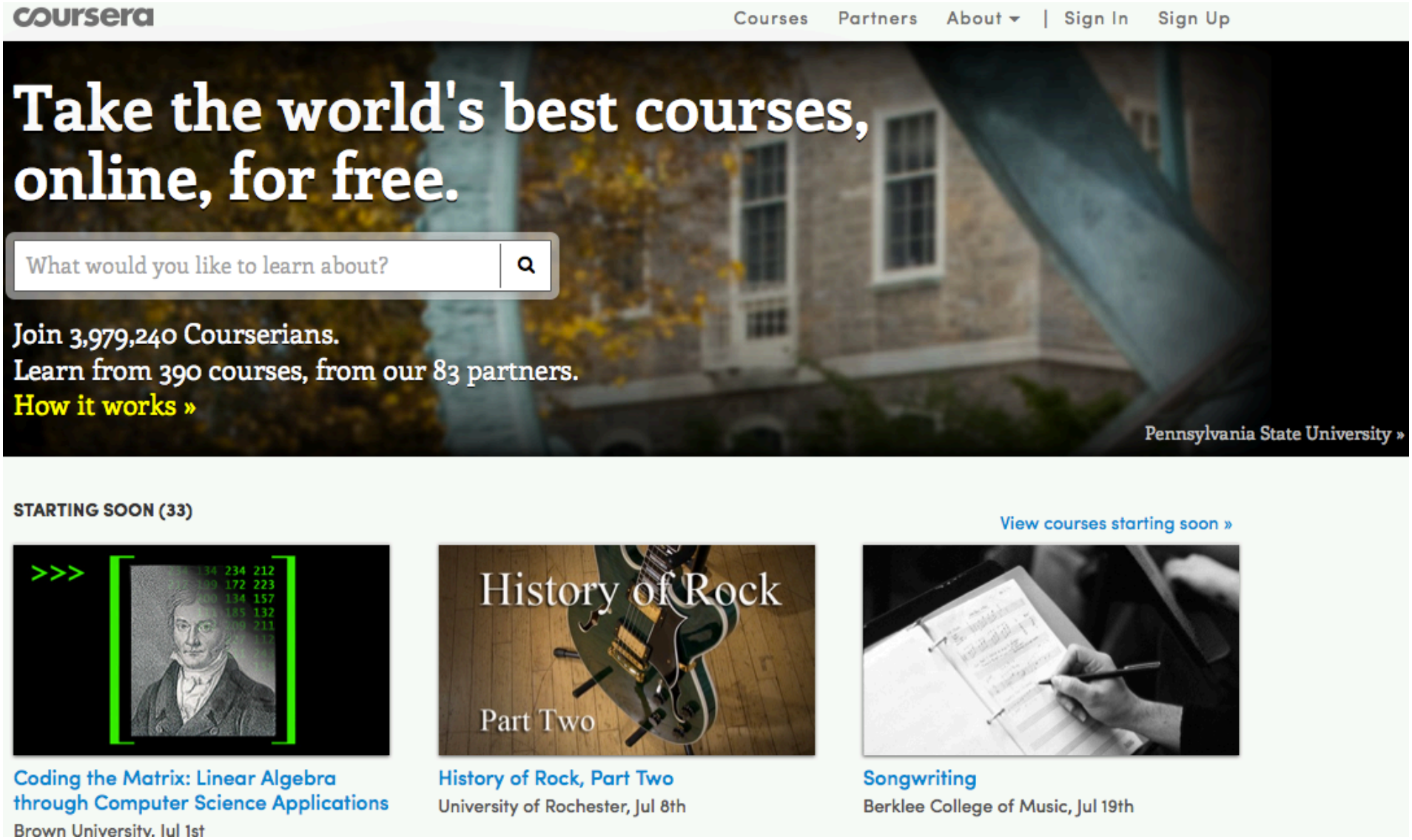
Salman Khan: http://www.youtube.com/watch?v=nTFEUsudhfs (0 – 1:36)

- Availability of (free) online learning materials

Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU (2:48-5:11)

COURSERA https://class.coursera.org/ (390 courses, 83 schools, 3,979,764 Coursarians)

UPDATED!!!



For profit, contracts with schools

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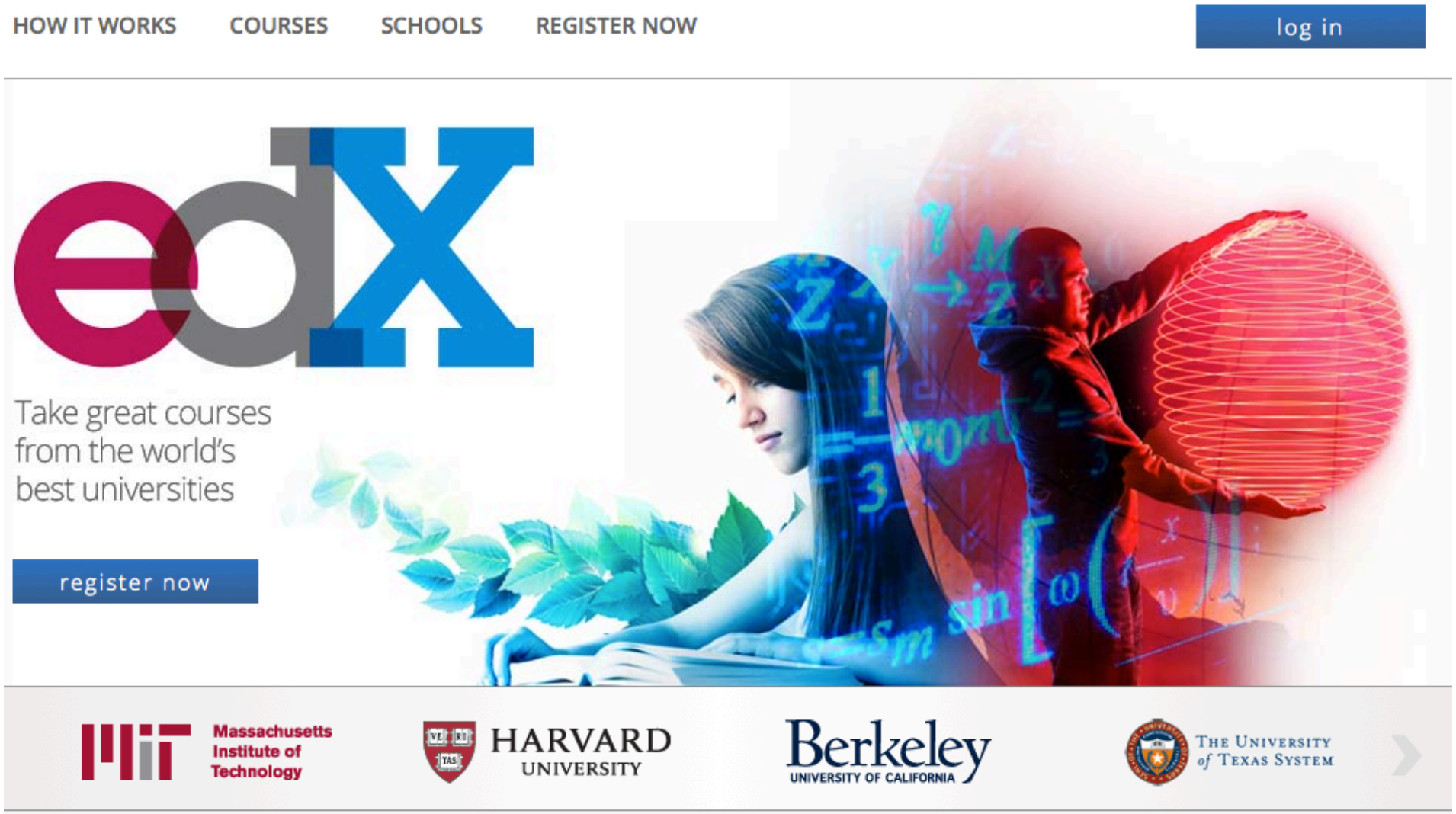
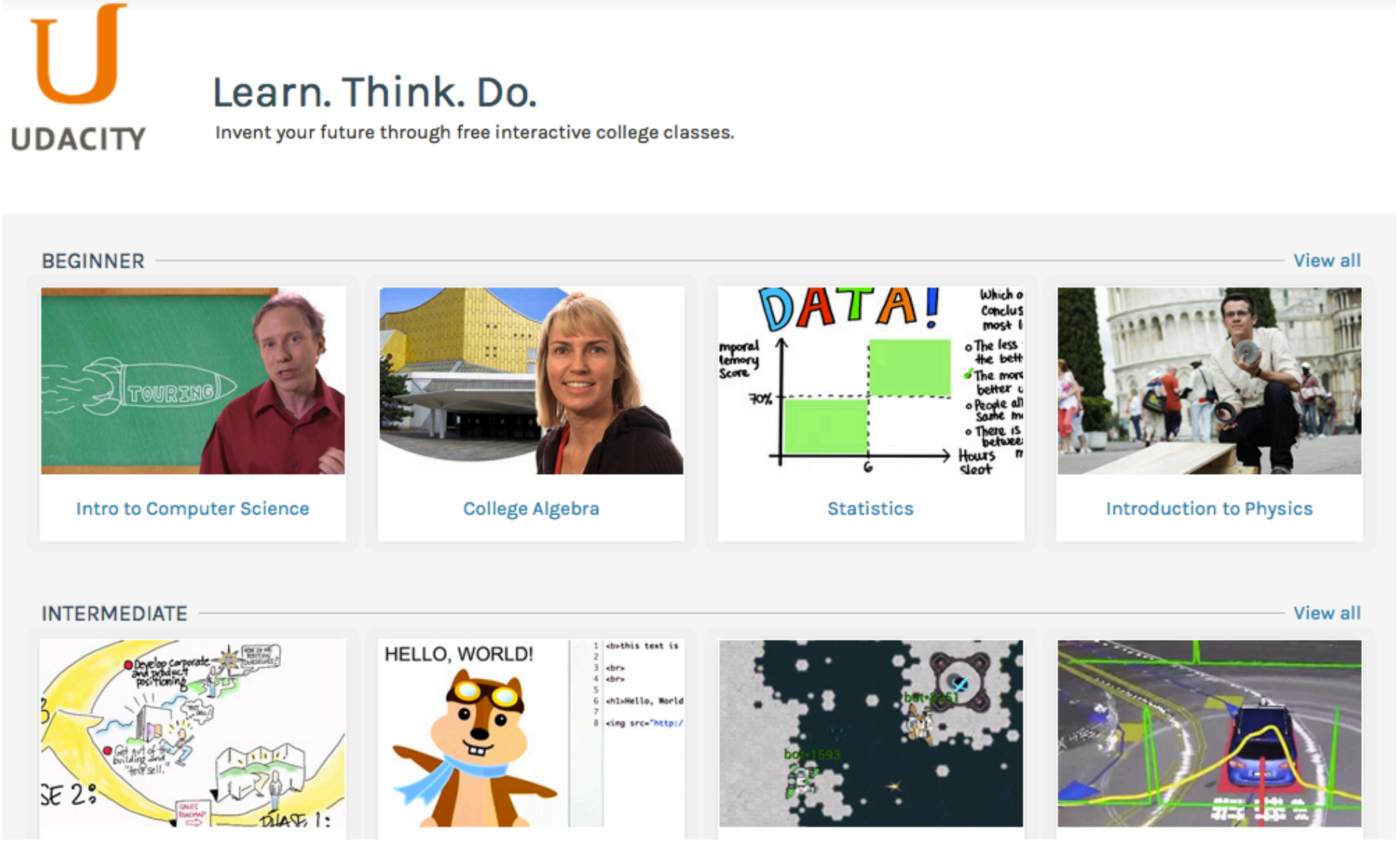
EdX https://www.edx.org (64 courses, 28 schools)



Not-for profit, contracts with schools

Udacity http://www.udacity.com (25 courses)



For profit, contracts with individual faculty members

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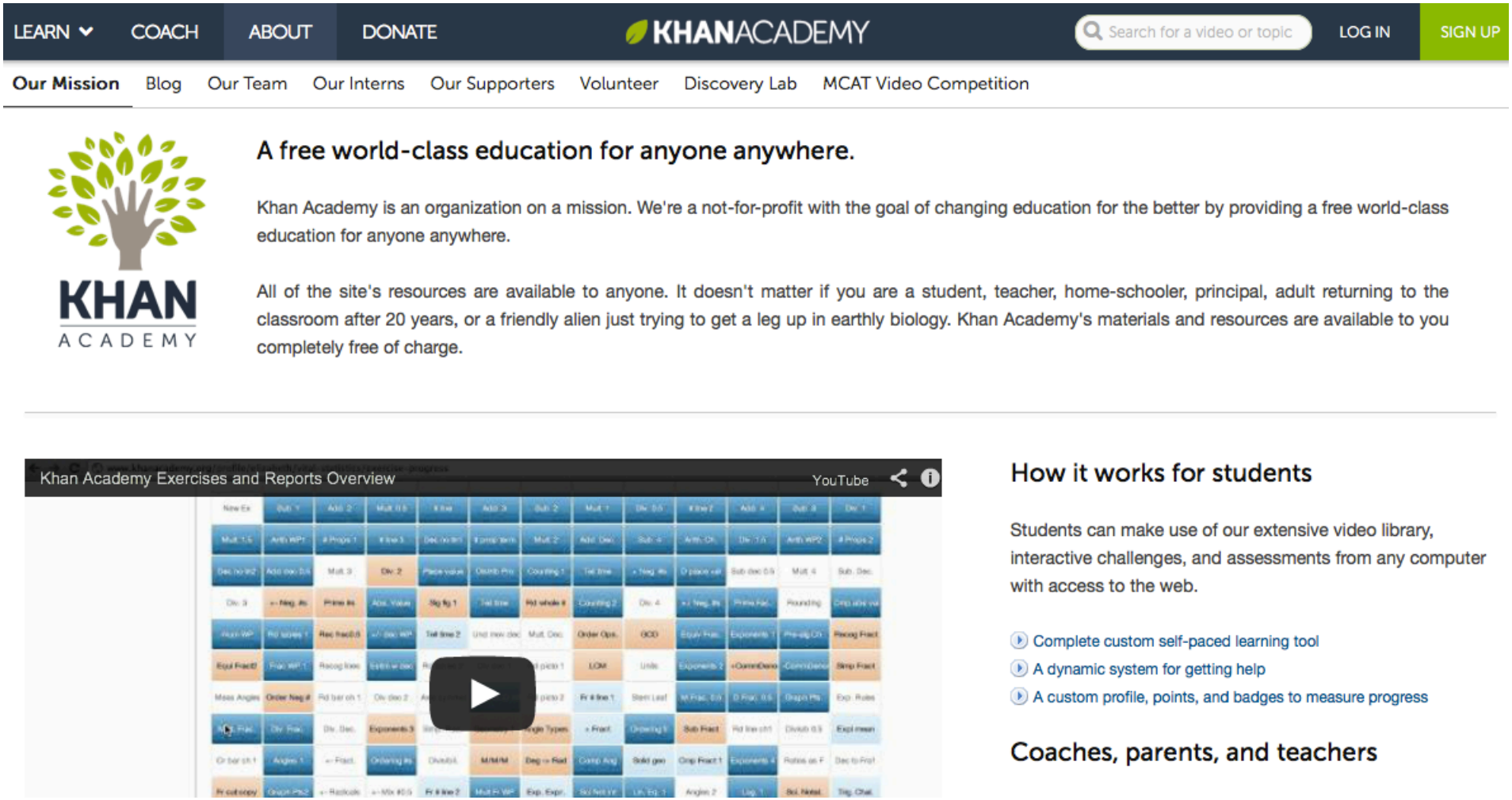
Khan Academy http://www.khanacademy.org (> 3,500 videos)



Not-for profit, one instructor (the Captain Kangaroo model, perhaps best for the young)

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Udemy http://www.udemy.com

For profit, contracts with individual faculty members, variable pricing

Massive Open Online Courses

http://cft.vanderbilt.edu/2013/03/a-conversation-about-massive-open-online-courses-moocs/

Massive: 100s; 1,000s; 10,000s of students

Open: free or at least affordable by most

Online: on the Web

Courses: standalone, given prerequisites satisfied

Massive Open Online Courses

http://cft.vanderbilt.edu/2013/03/a-conversation-about-massive-open-online-courses-moocs/

Courses: standalone, given prerequisites satisfied

Lectures (on video)

Quizzes

Assignments

Exams

Discussion Forums

- Personalization and Humanization through Technology

Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU (5:11 – 6:00)

- Technological and Pedagogical Theory

Peter Norvig: http://www.youtube.com/watch?v=tYclUdcsdeo (0 – 4:01)

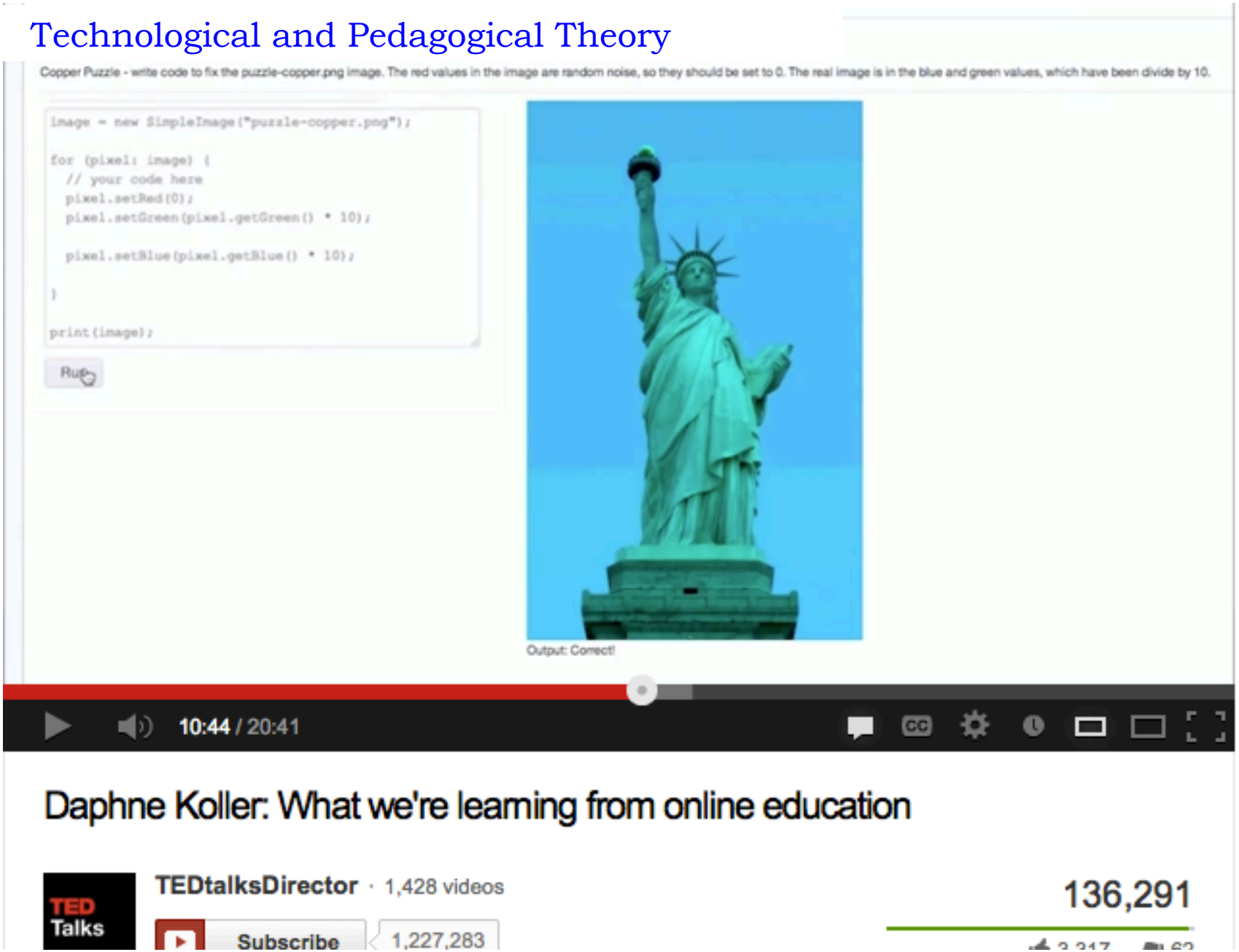
- Pedagogy and humanization

Salman Khan: http://www.youtube.com/watch?v=nTFEUsudhfs (1:36-5:20)

- Technological and Pedagogical Theory

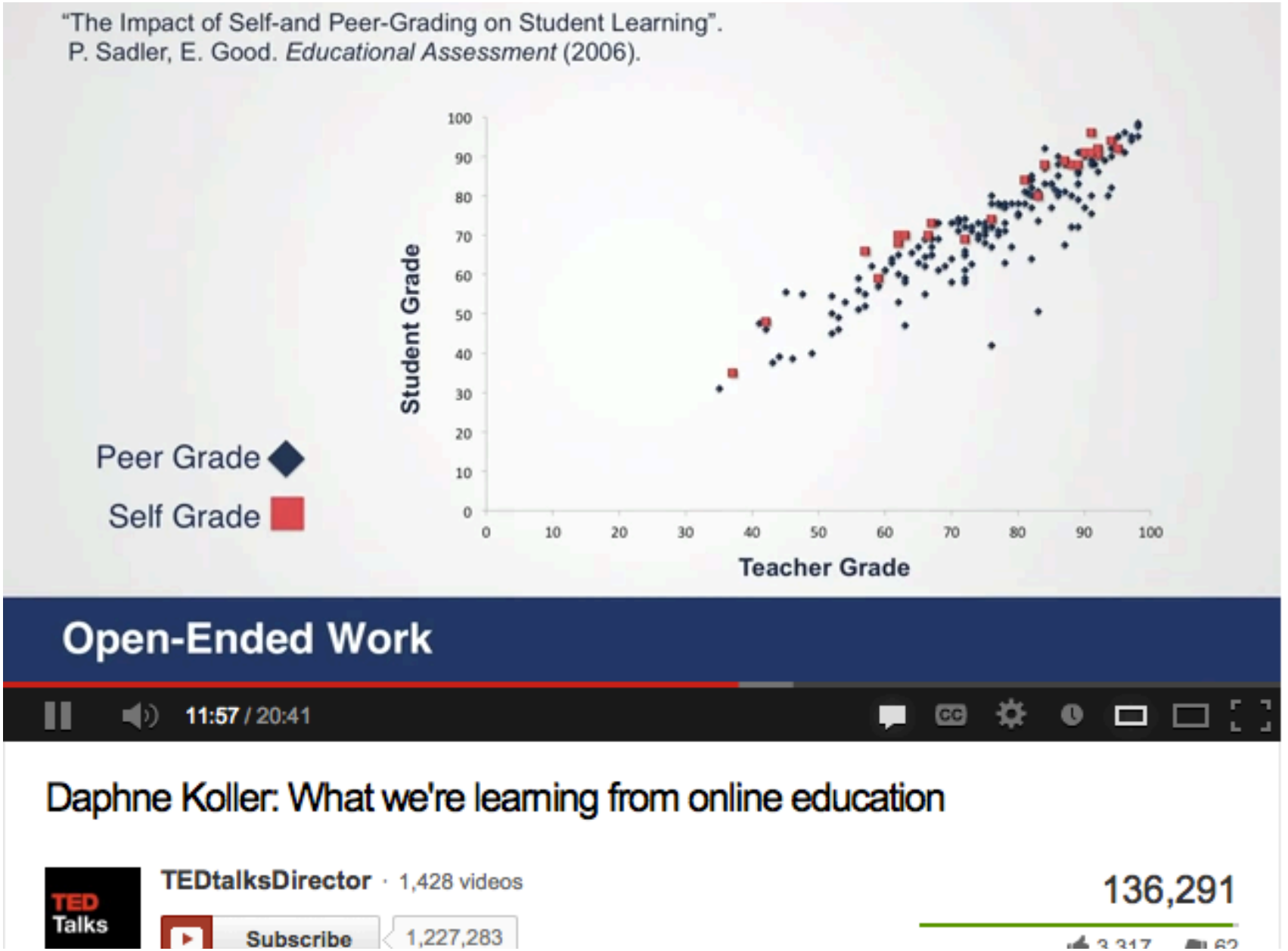
Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU (5:55 – 9:37)

- Technological and Pedagogical Theory



Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU (9:37–10:55)

- Technological and Pedagogical Theory (Limitations and “solution”)



Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU (10:55-12:14)

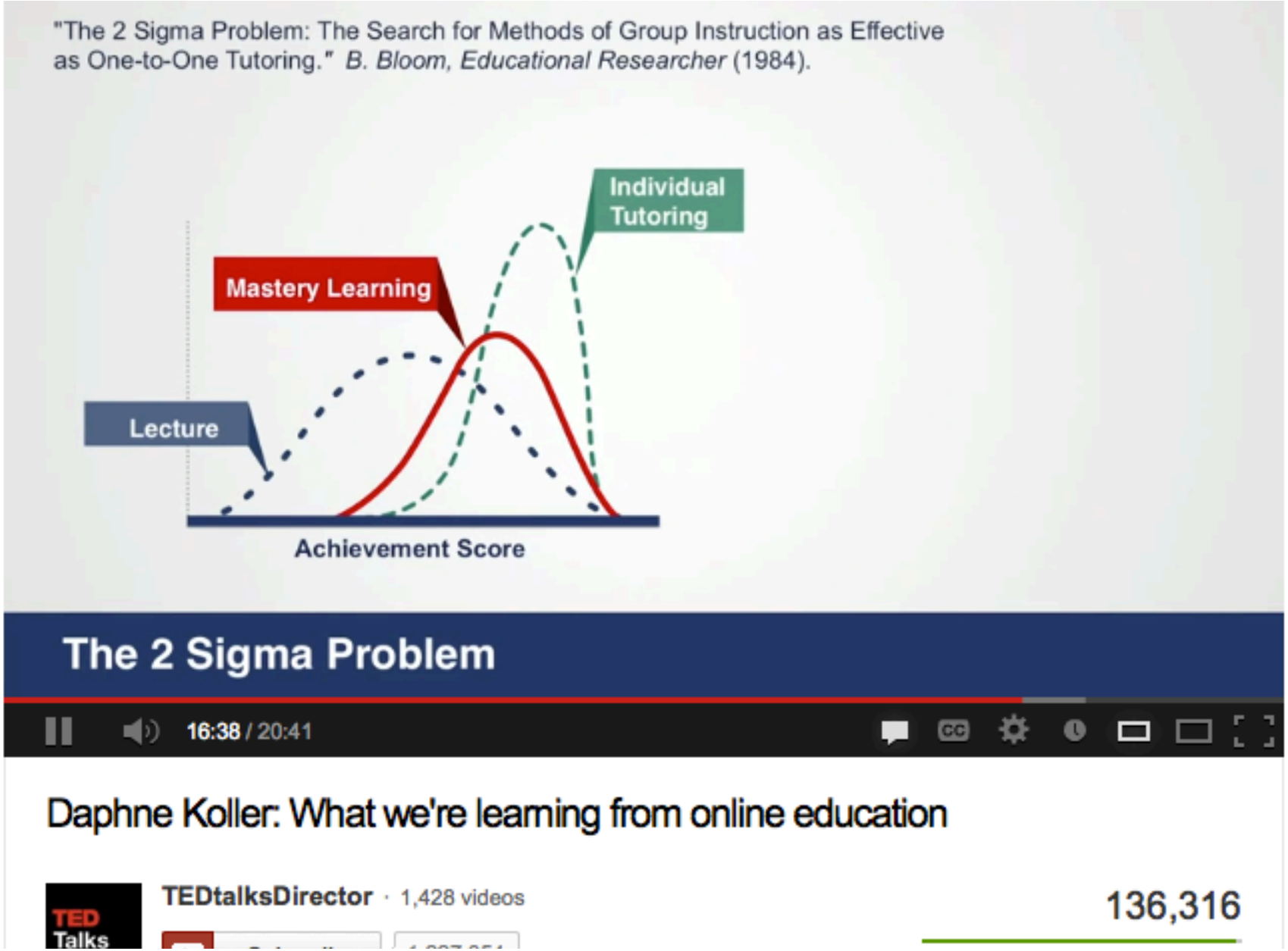
- Global and local learning communities

Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU (12:14–14:09)

- Global and local learning communities

Doug Schmidt (Virtual Office Hours)
https://www.youtube.com/watch?v=EAscOxl5Vss&feature=c4-feed-u
(35:43)

- Personalization



Daphne Koller: http://www.youtube.com/watch?v=U6FvJ6jMGHU (14:09-17:45)

Examples of MOOCs

coursera COURSES UNIVERSITIES ABOUT ▼ DOUG ▼

Your Courses

Screenshot of https://www.coursera.org

Machine Learning

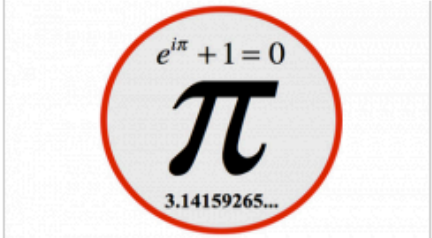
Aug 20th — Oct 29th

Aug 20th 2012
10 weeks long
Go to class
View course info | Un-enroll

Introduction to Sustainability

Aug 27th — Oct 22nd

Aug 27th 2012
8 weeks long
Go to class
View course info | Un-enroll



Introduction to Mathematical Thinking

Sep 17th — Nov 5th

Sep 17th 2012
7 weeks long
Go to class
View course info | Un-enroll

Software Engineering for SaaS

Ended 4 months ago

May 18th 2012
5 weeks long
View class archive
View course info | Un-enroll

Introduction to Databases

To be announced
10 weeks long

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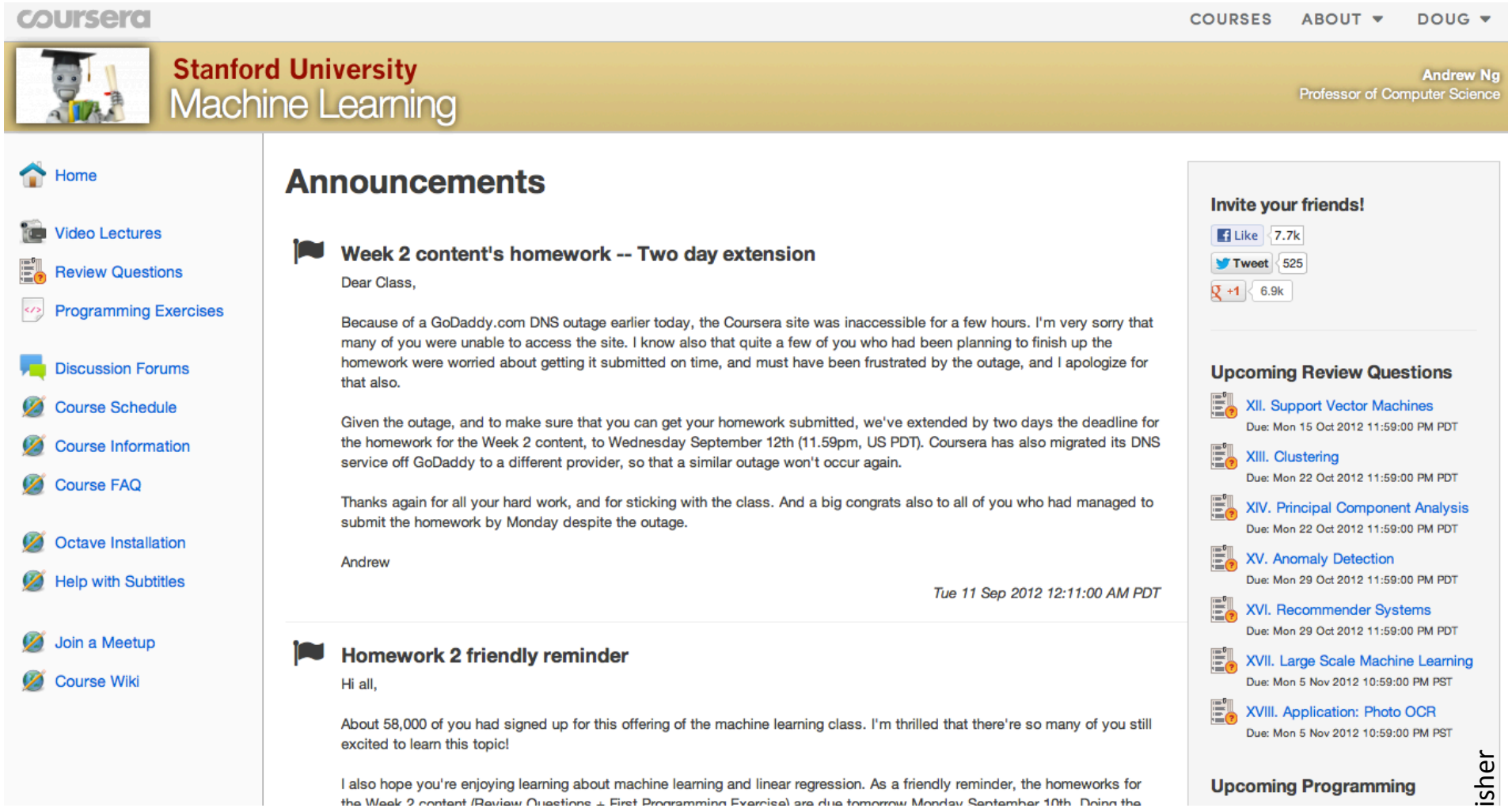
Examples of MOOCs



Screenshot of https://class.coursera.org/ml-2012-002/class/index

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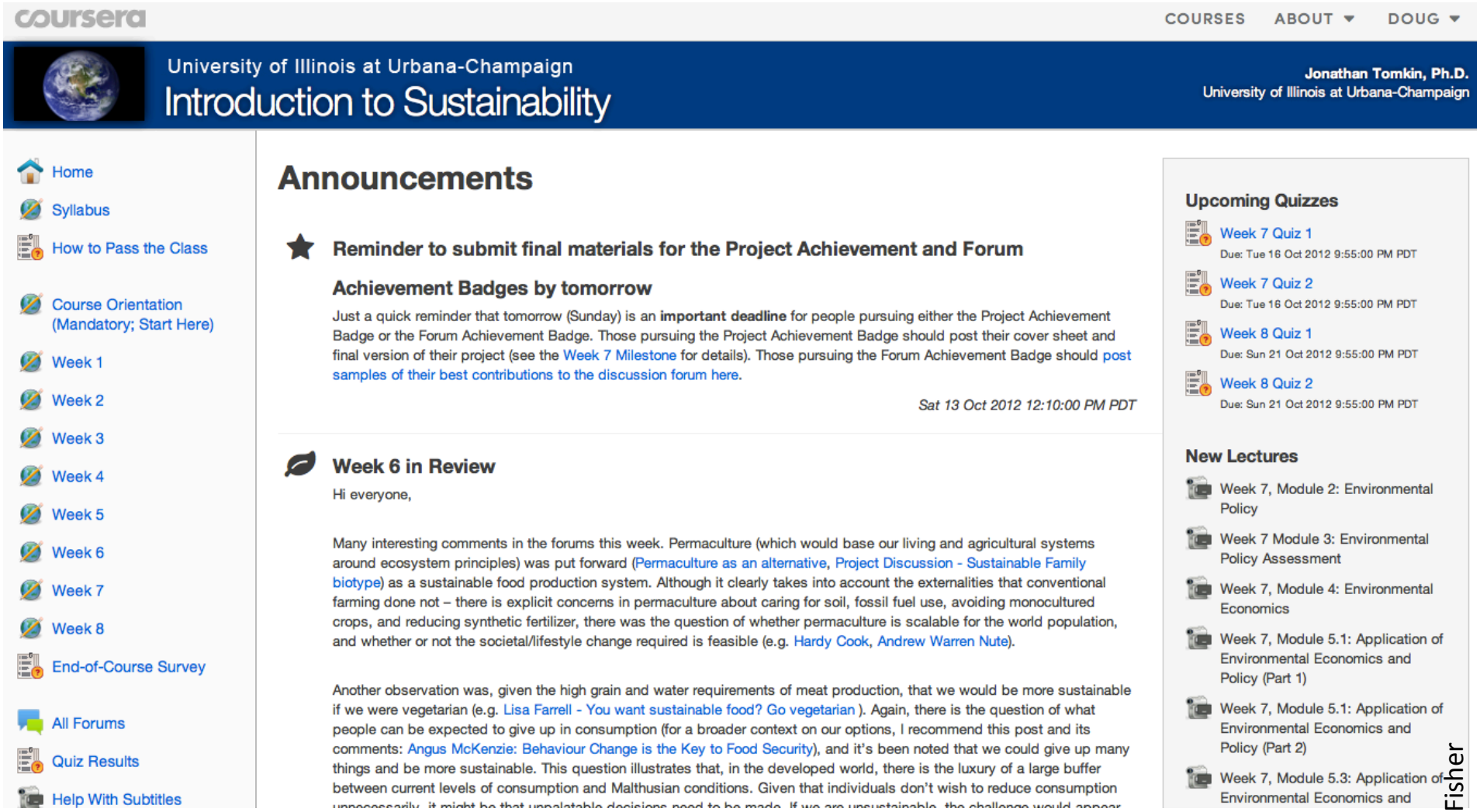
Examples of MOOCs



Screenshot of https://class.coursera.org/sustain-2012-001/class/index

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Massively Open Online Courses: Focus on Access, Cost, and … Quality for individuals

Accessibility and affordability

"*MOOCs, have the potential to make quality education a basic, international human right.*"★

(but "*MOOCs may pose a grave threat to financially struggling colleges and universities with less prestigious brand names.*" ★)

★Stephen Smith, "The World-Wide U", American Radio Works, americanradioworks.publicradio.org/features/tomorrows-college/keyboard-college/moocs.html

Consortium on Urban and Metropolitan Universities (CUMU) mission: "*… to use the power of their campuses in education, research, and service to enhance the communities in which they are located.*" (http://www.cumuonline.org/about.aspx)

How can MOOCs be folded into CUMU's mission?

OSHER Course Lifelong Learning on the Web (Resources)

Overview Videos

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Salman Khan: http://www.youtube.com/watch?v=nTFEUsudhfs

Peter Norvig: http://www.youtube.com/watch?v=tYclUdcsdeo

Find an online course or video collection that interests you

COURSERA https://class.coursera.org/

EdX https://www.edx.org

Udacity http://www.udacity.com

Udemy http://www.udemy.com

Khan Academy http://www.khanacademy.org

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YOUR COURSES

Maps and the Geospatial Revolution

Starts in 16 days

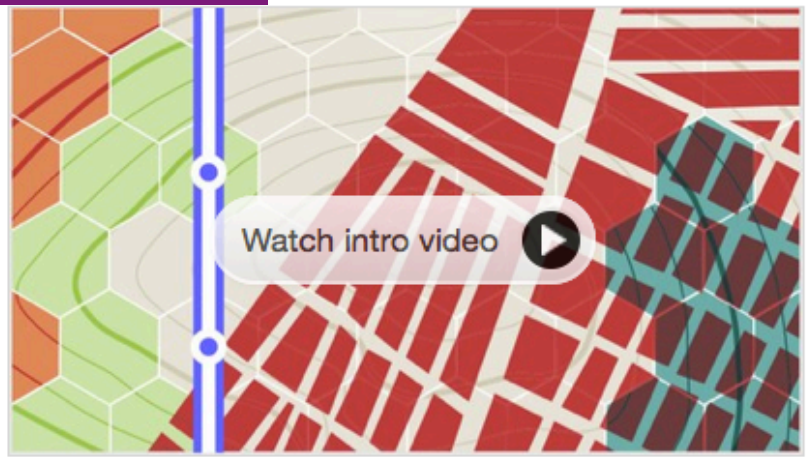
Jul 17th (5 weeks long)

coursera | Global Partners Courses Partners About | Douglas H...

https://www.coursera.org/course/maps

PENNSTATE

Maps and the Geospatial Revolution



Dr. Anthony C. Robinson

Learn how advances in geospatial technology and analytical methods have changed how we do everything, and discover how to make maps and analyze geographic patterns using the latest tools.

Workload: 6-9 hours/week

A MOOC that I have signed up for!

Sessions:

Jul 17th 2013 (5 weeks long) You are enrolled!

Future sessions Add to Watchlist

450 Tweet 133 +1 1.2k Like

But …

- What of using MOOCs and ***other online material*** to increase the ***BANG for the buck*** of the ON-CAMPUS and other in-group experience
  - + undergraduate
  - + K-12
  - + adults over 50 (i.e., OSHER!)

Proposal

- An OSHER course that is wrapped around a MOOC

  … with local faculty and student facilitators

Next Week

- Using online material to increase bang for the buck on campus
- Other forms of online and digital learning opportunities
- Crowd-sourcing for education (e.g., Wikimedia, such as Wikipedia and Wikibooks)
- Behind the Scenes in creating a MOOC
- Creating your own content
- Another Proposal (Writing a Wikibook)
- Preview:
  https://my.vanderbilt.edu/douglasfisher/files/2013/06/DougFisherMOOCsOnCampusPresentation.pdf

And after that we'll be doing some drilling down (e.g., cheating, privacy) and tailoring to your interests