



Aalto University
School of Science

Aalto Digi Breakfast

MOOCs

27.08.2014

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Program

- Opening
 - MOOCs - Where is the World Going to? (prof. Lauri Malmi)
 - Are MOOCs Just Emperor's New Clothes? (prof. Teemu Leinonen)
 - MOOCs from Stanford Point of View (senior scientist Ari Korhonen)
 - Experiences from Running a Programming MOOC in Finland (Head of Studies, Jaakko Kurhila, University of Helsinki)
 - Industrial Perspective: Eliademy (Sotiris Makrygiannis, Eliademy)
 - Discussion
 - Closing words
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MOOCs - where is the world going to?

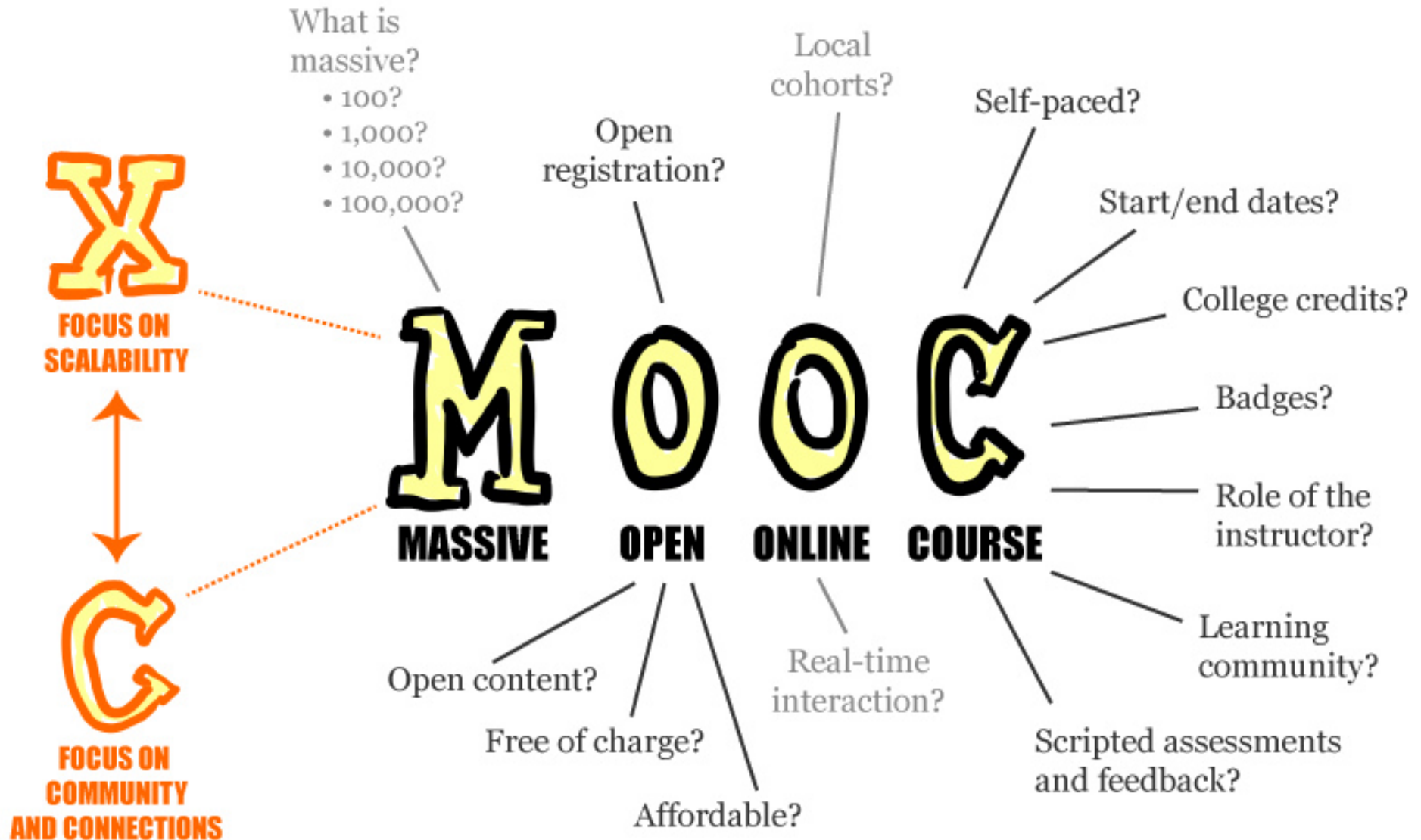
Lauri Malmi

Aalto University

Department of Computer Science and Engineering

27.08.2014

What is a MOOC?

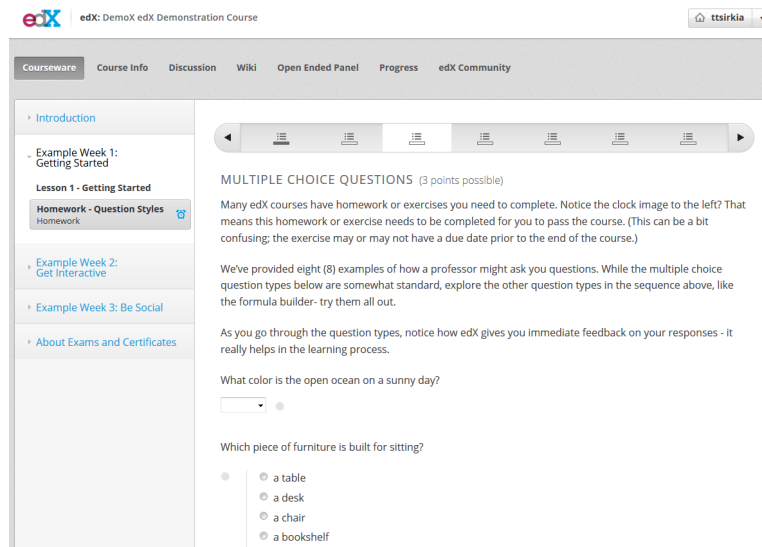


Typical MOOCs

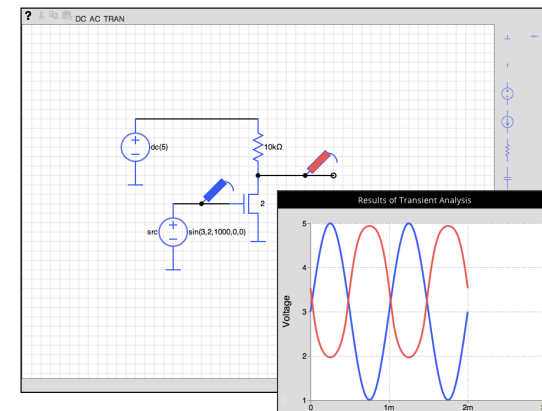
- There are hundreds of universities offering MOOCs. They cover for example:
- arts, biology, business, computer science, economics, history, humanities, law, literature, mathematics, physics, social sciences etc...

Content in MOOCs

- Videos, online static content
- Exercises (often multiple choice questions)
- Discussion forum



The screenshot shows the edX courseware interface for a "DemoX edX Demonstration Course". The user is logged in as "ttsirkia". The courseware page is titled "Introduction" and shows a sidebar with navigation options: "Example Week 1: Getting Started", "Lesson 1 - Getting Started", "Homework - Question Styles Homework", "Example Week 2: Get Interactive", "Example Week 3: Be Social", and "About Exams and Certificates". The main content area displays a "MULTIPLE CHOICE QUESTIONS (3 points possible)" section. It includes an introductory paragraph about homework, a paragraph explaining question types, and a question: "What color is the open ocean on a sunny day?". Below the question is a dropdown menu with a blue circle next to it. Another question follows: "Which piece of furniture is built for sitting?", with four radio button options: "a table", "a desk", "a chair", and "a bookshelf".



Some MOOC ecosystems

All the current major MOOC ecosystems were launched in the beginning of 2012.

 coursera

7 million users, 600 courses

 edX

2 million users, 150 courses

 UDACITY

160 000 users, 30 courses

 Future Learn BETA

 iversity

 openlearning

 OPEN 2 STUDY

Research in MOOCs

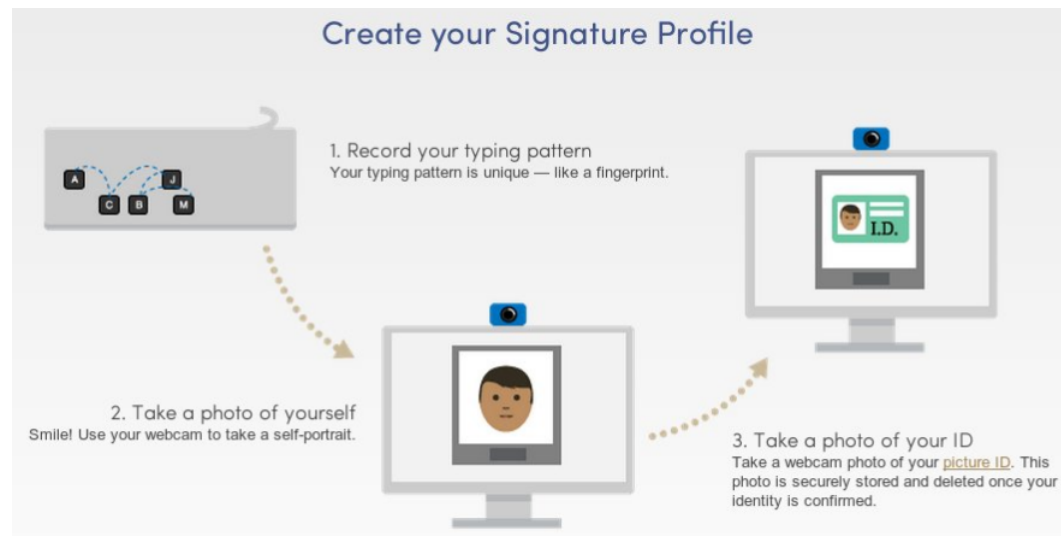
- MOOCs provide lots of data, a great resource for research
- First Learning@scale conference was on March 2014
 - For example, video engagement, demographic differences

Other papers:

- T. Liyanagunawardena, A. Adams, S. Williams, *MOOCs: A Systematic Study of the Published Literature 2008-2012*. The International Review of Research in Open and Distance Learning, July 2013.
- A. Eckerdal, P. Kinnunen, N. Thota, A. Nylén, J. Sheard, L. Malmi. *Teaching and learning with MOOCs: computing academics' perspectives and engagement*. Proceedings of the 2014 conference on Innovation & technology in computer science education (ITiCSE '14). ACM, 9-14.

Open practical questions

- Business model
- Grading
 - Instructor
 - Peer
 - Computer
- Verification
- Accreditation



Open strategic questions

- What kind of role will MOOCs have in university education?
 - How can they complement current university education?
 - Will they replace some courses?
 - Will they abolish lower-tier universities?
 - What incentives there are to build own MOOCs?
 - Will their pedagogy turn HE decades backwards to old transmissive lecture-based education, or *can we innovate new pedagogical models?*
 - What kind of students can cope with MOOCs?
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Where do we want to go?

New MOOC in programming, see
<http://mooc.aalto.fi/>