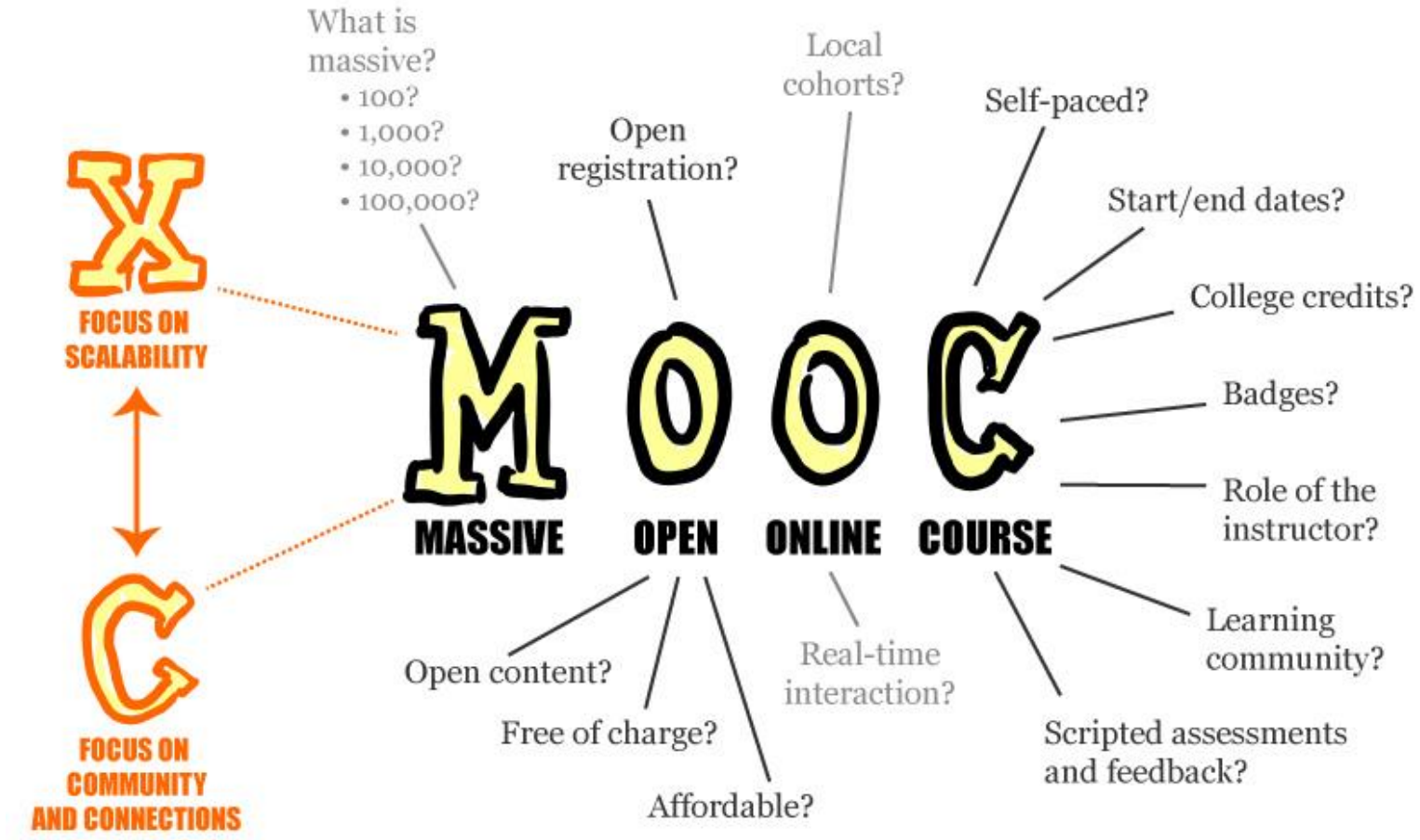
Massive Open Online Courses

Outline

History

- 19 century: broadcast of courses by radio and television (5% of students would complete courses)
- 20 century: online presence, open learning oppurtunities and MOOCs
- 2008 MOOC raise up by Connective Knowledge (25/2200 traditional/online)
- 2012 became the year of the MOOC (several well-financed providers, associated with top universities, emerged, including Coursera, Udacity, and edX)

MOOC –Massive Open Online Courses



Massive

400,000 participants in MOOCs at TU Delft

15 April 2015 by *Webredactie Communication*

A year and a half after the start of the first Massive Open Online Course (MOOC) at TU Delft, 400,000 people around the world have participated in a course or signed up for one that will start shortly. TU Delft is now offering 18 MOOCs and a number of courses are being run for the second time.

Massive Study from Harvard and MIT on MOOCs Provides New Insights on an Evolving Space

"We explored 68 certificate-granting courses, 1.7 million participants, 10 million participant-hours, and 1.1 billion participant-logged events," said the study's co-lead

Massive

August 27, 2013

MOOC Recognition: In Australia's Hands

Leave a comment

Last week the NY Times reported that the Georgia Institute of Technology plans to offer a master's degree in computer science through massive open online courses "for a fraction of the on-campus cost". Further, "from their start two years ago, when a free artificial intelligence course from Stanford enrolled 170,000 students, free massive open online courses, or MOOCs, have drawn millions... in a tough electronics course offered by the Massachusetts Institute of Technology. But the courses have not yet produced profound change, partly because they offer no credit and do not lead to a degree. The disruption may be approaching, though, as Georgia Tech, which has one of the country's top computer science programs, plans to offer a MOOC-based online master's degree in computer science for $6,600 — far less than the $45,000 on-campus price."

Open

- The original MOOCs…were "open" in two respects. First, they were open enrollment to students outside the hosting university. That is open as in "***open registration***." Second, the materials of the course were licensed using Creative Commons licenses so their materials could be **remixed** and **reused** by others. That is open as in "***open license***."

OER (Open Educational Resources)

- ***OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others.*" That is, for an educational resource to be "open" it must be both gratis (available at no-cost) and libre (everyone has the legal rights to repurpose the resource). An OER cannot be freely available or openly licensed – it must be both freely available and openly licensed (or in the public domain) to be an OER.**

Online

- Online Materials (Video,Assignments, Quises)
- Realtime interaction?
  - Online Quiz and Assignments
  - Auto graders (for programming assignments)
  - Online repositories (Github,…)
  - Online Forums
  - Piazza (Q&A platform)

Online (Piazza)

piazza Product In Professors' Words Support About Us Piazza For Companies Sign Up Login

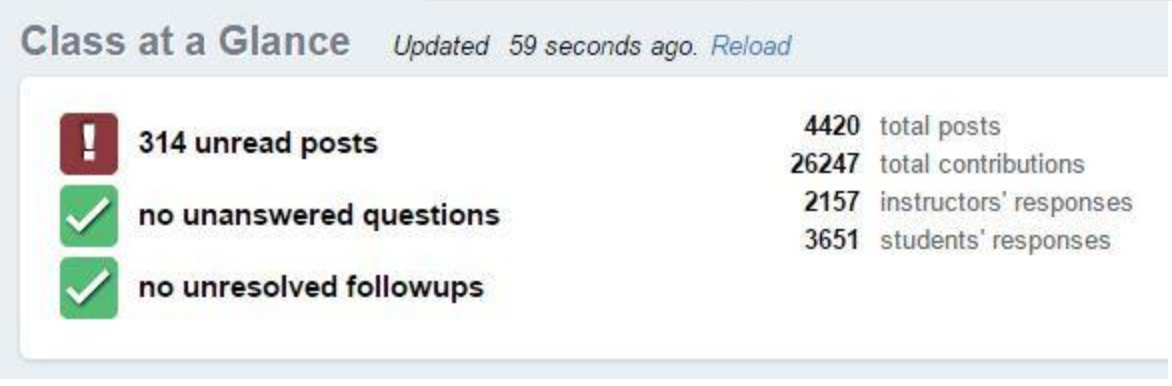
The incredibly easy, completely free Q&A platform

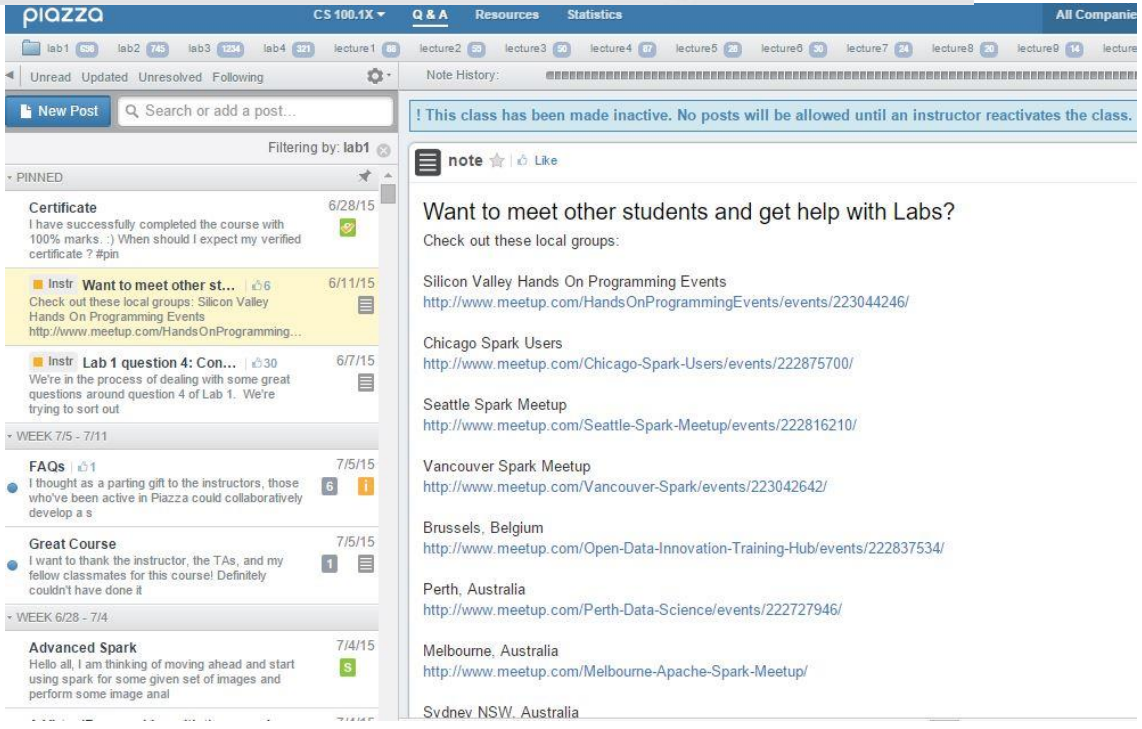
Save time and help students learn using the power of community

Average Response Time: 19 min

Special Mentions: Anthony D. Joseph answered Latest VM for best... in 4 min. 2 months ago

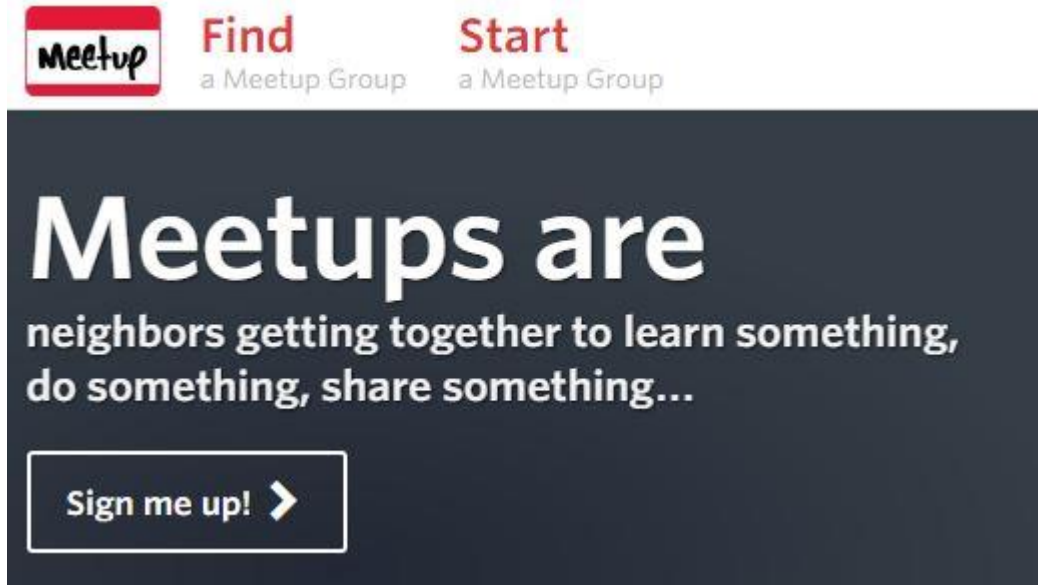
Online Now | This Week: 6 | 6617





Online

- Local Cohorts?



Course

- Self-paced?
- Start/end dates?
- College credits?
- Badges?
- Role of the instructor?
- Learning community?

MOOC certificate

- **Free Courses Credential Key**
  CC = Certificate of Completion
  CA = Certificate of Accomplishment
  HCC – Honor Code Certificate
  VC$ = Verified Certificate
  VCA$ = Verified Certificate of Accomplishment
  SA = Statement of Accomplishment
  SP$ = Statement of Participation
  CM = Certificate of Mastery
  NI – No Information About Certificate Available
  NC = No Certificate

cMOOC Connections_ Focus on community and connections

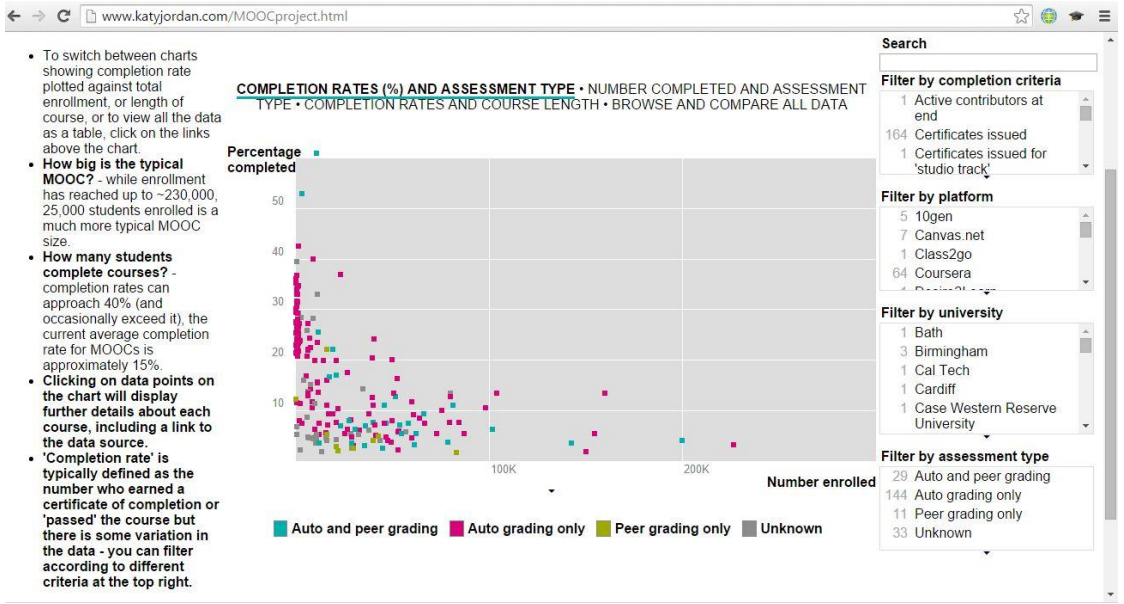
- Don't contact directly to teacher.
- If your question is regular there is at least one person with that question.
- Post your question in Q&A websites like stack overflow, piazza,

Why use MOOC

- Just to learn (students and teachers)
- Keep in touch with others in a special context
- Get job by certificates
- Get college for credits

MOOC finish rate

- MOOCs have generated 50,000 enrollments on average, with the typical completion rate hovering below 10%. Put it somewhere around 7.5%, or 3,700 completions per 50,000 enrollments.



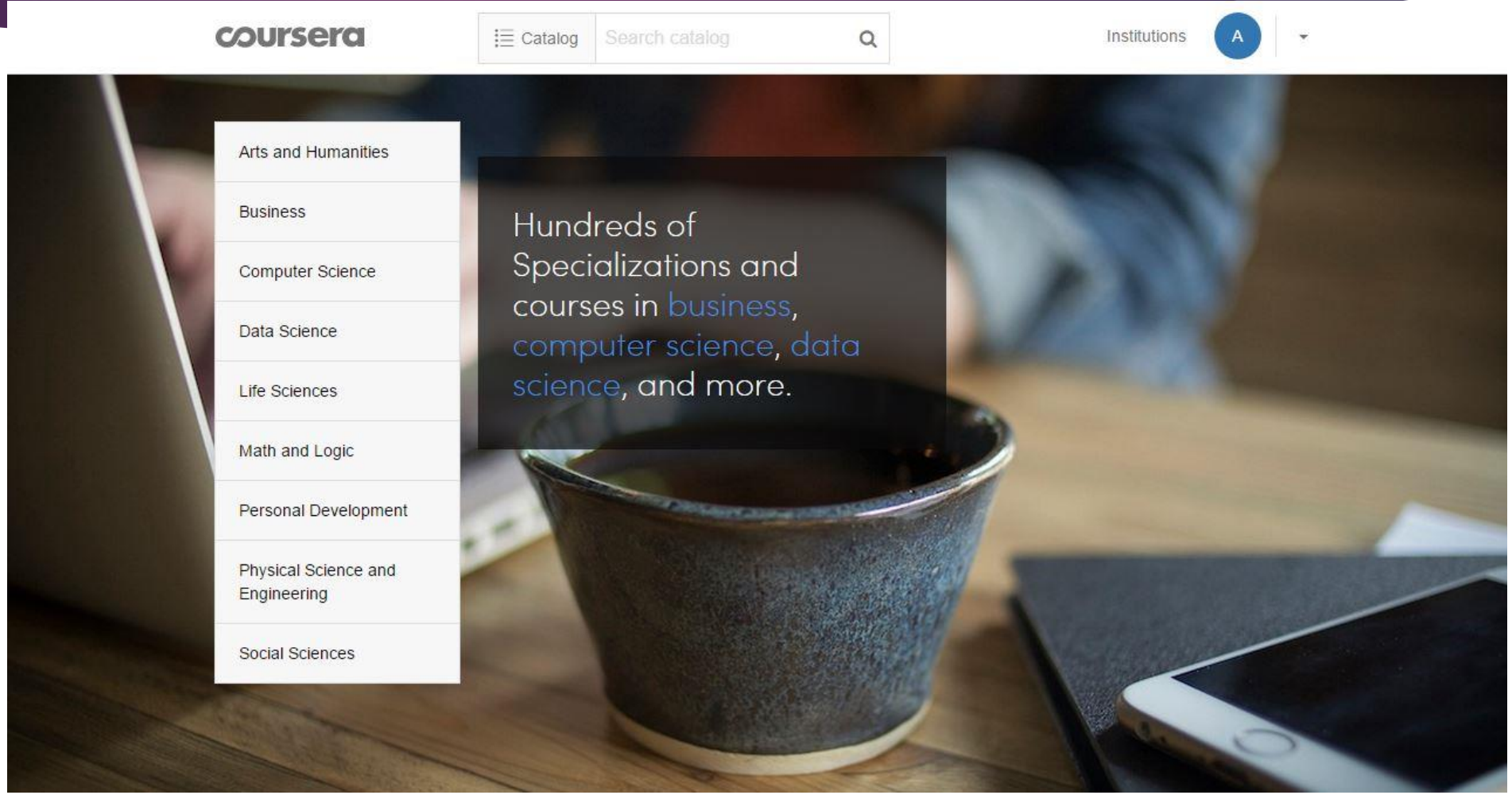
mooc-list.com

Course Categories

- Art, Architecture, and Design
- Biology & Life Sciences
- Business & Management
- Chemistry
- Computer Science: Artificial Intelligence, Robotics, Vision
- Computer Science: Programming & Software Engineering
- Computer Science: Systems, Security, Networking
- Computer Science: Theory
- Economics & Finance
- Education
- Energy & Earth Sciences
- Engineering
- Food and Nutrition
- Health & Society
- Humanities
- Information, Technology, and Design
- Languages & Literature
- Law
- Marketing & Communication
- Mathematics
- Medicine & Pharmacology
- Music, Film & Audio
- Personal & Professional Development
- Physical & Earth Sciences
- Physics
- Social Sciences
- Sports
- Statistics & Data Analysis
- Teacher Professional Development
- Veterinary

mooc-list.com

Coursera


coursera
Catalog
Search catalog
Institutions
A
Arts and Humanities
Business
Computer Science
Data Science
Life Sciences
Math and Logic
Personal Development
Physical Science and Engineering
Social Sciences
Hundreds of Specializations and courses in business, computer science, data science, and more.

Coursera (Business Model)

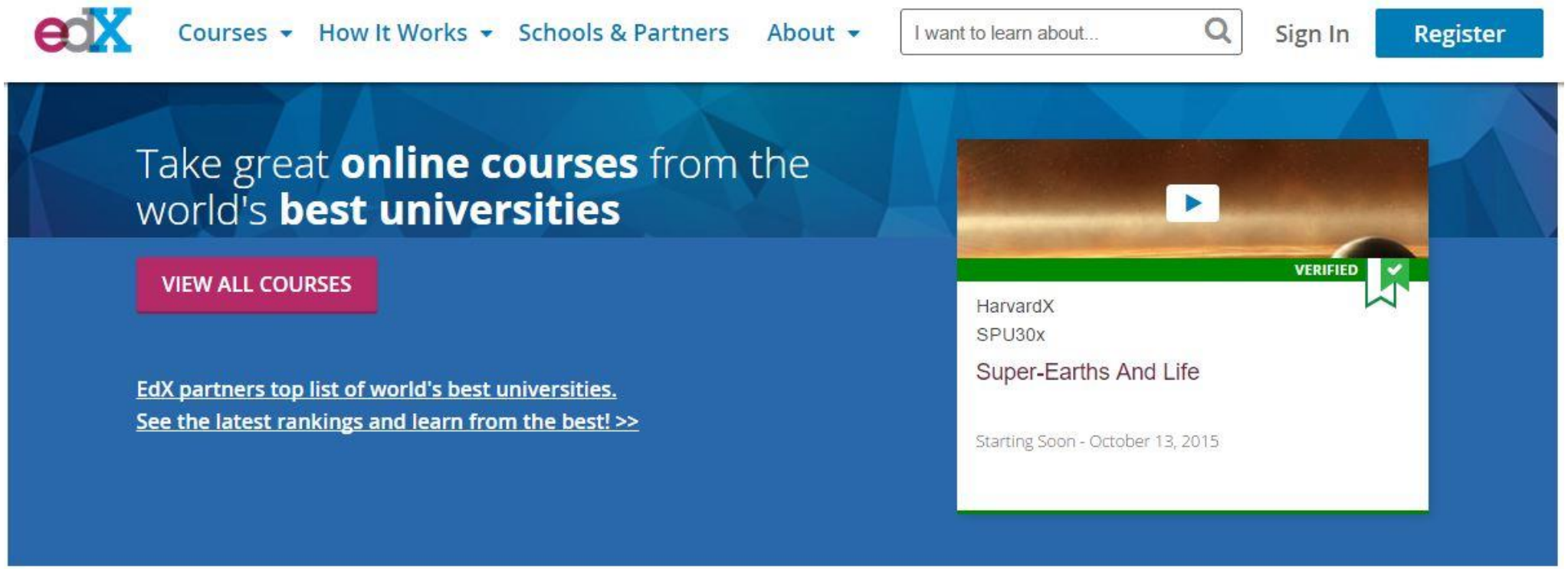
- verified certification fees
- introducing students to potential employers and recruiters (with student consent)
- Tutoring
- Licensing
- sponsorships and tuition fees.

- In September 2013 it announced it had earned $1 million in revenue through verified certificates that authenticate successful course completion

Coursera (History)

- Founded in 2012 by computer science professors Andrew Ng and Daphne Koller from Stanford University.
- As of October 2014, Coursera had reached 839 courses and 10 million users.
- As of May, 2015, Coursera had more than 1000 courses from 119 institutions and 13 million users from 190 countries.

edX


edX
Courses
How It Works
Schools & Partners
About
I want to learn about...
Sign In
Register
Take great online courses from the world's best universities
VIEW ALL COURSES
EdX partners top list of world's best universities.
See the latest rankings and learn from the best! >>
VERIFIED
HarvardX
SPU30x
Super-Earths And Life
Starting Soon - October 13, 2015

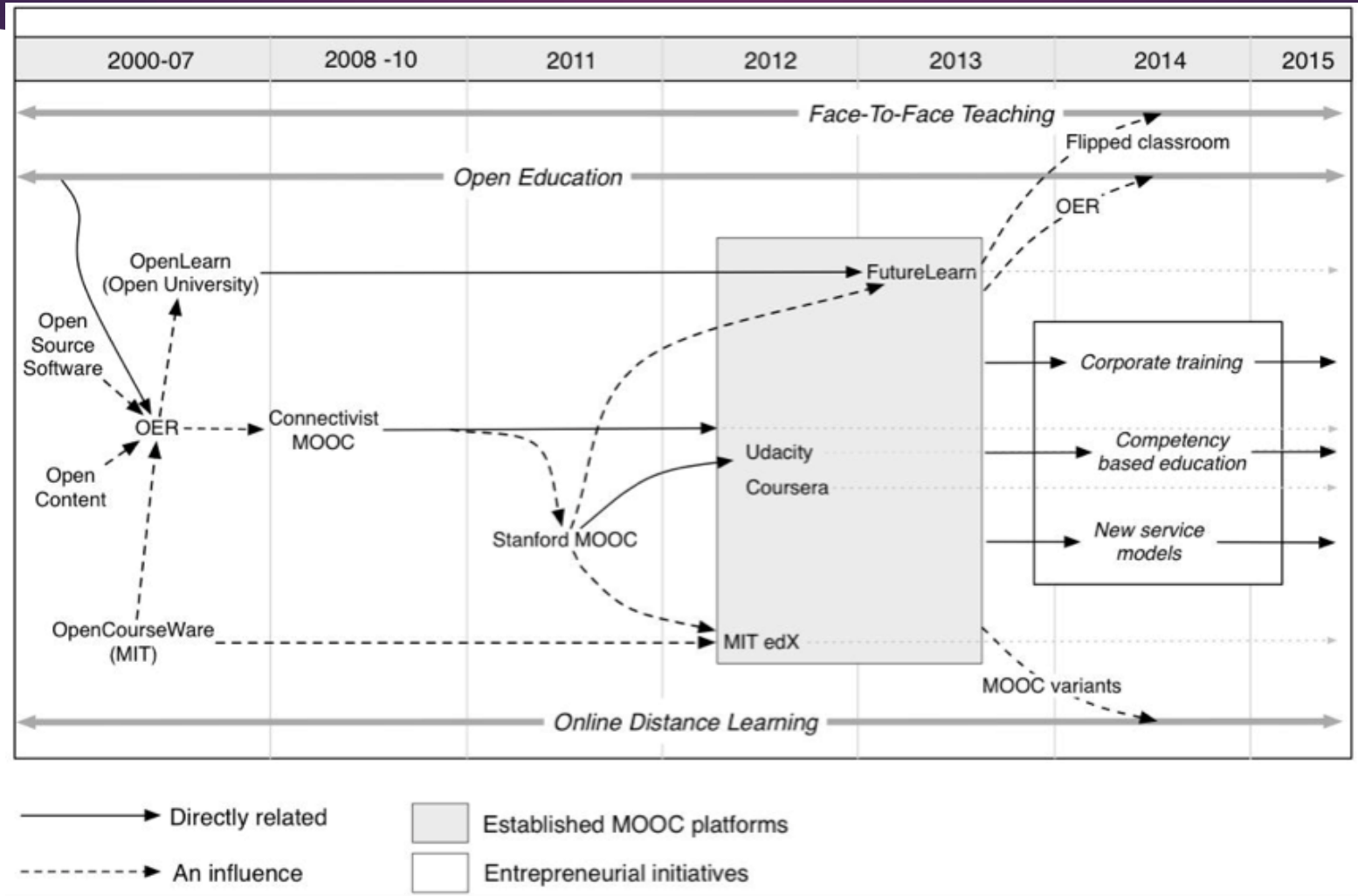
edX

- nonprofit organization and runs on open-source software.
- entrepreneurial aspect: help the nonprofit to access "commercial opportunities."

edX (History)

- EdX was founded in May 2012 by scientists from Harvard and MIT. Gerry Sussman, Anant Agarwal, Chris Terman, and Piotr Mitros teach the first edX course on circuits and electronics from MIT, drawing 155,000 students from 162 countries. In 2013 they partnered with Stanford and in June 2013 they reached 1 million students. edx.org released as open source, creating Open edX.
- In September 2014 edX announced a high school initiative
- In October 2014 edX announced Professional Education courses, and in March 2015 it partnered with Microsoft.
- In April 2015, edX partnered with Arizona State University to launch the Global Freshman Academy.

MOOCs and Open Education Timeline



some key ideas and trends around the following aspects:

- **Open license**: Most MOOC content is not openly licensed so it cannot be reused in different contexts. There are, however, a few examples of institutions using Creative Commons licences for their courses – meaning they can be taken and re-used elsewhere. In addition, there is a trend for MOOC to be made available 'on demand' after the course has finished, where they in effect become another source of online content that is openly available. Those OERs and online content can be used to develop blended learning courses or support a flipped classroom approach in face-to-face teaching.

some key ideas and trends around the following aspects:

- **Online learning pedagogy**: New pedagogical experiments in online distance learning can be identified in addition to the c/xMOOC with variants including SPOCs (Small Private Open Courses), DOCCs (Distributed Open Collaborative Course) and SOOCs (Social Online Open Course or Small Open Online Course). It is likely that they will evolve to more closely resemble regular online courses with flexible learning pathways. These will provide a range of paid-for services, including learning support on demand, qualitative feedback on assignments, and certification and credits (Yuan and Powell 2014).

some key ideas and trends around the following aspects:

- **New educational provisions**: The disruptive effect of MOOCs will be felt most significantly in the development of new forms of provision that go beyond the traditional HE market. For example, the commercial MOOC providers, such as Udacity and Coursera, have moved on to professional and corporate training, broadening their offerings to appeal to employers (Chafkin, 2013). In an HE context, platforms are creating space for exam-based credit and competency-based programs which will enable commercial online learning providers to produce a variety of convenient, customizable, and targeted programs for the emergent needs of the job market backed by awards from recognized institutions.

some key ideas and trends around the following aspects:

- **Add-on Services**: The development of online courses is an evolving model with the market re-working itself to offer a broader range of solutions to deliver services at a range of price levels to a range of student types. There is great potential for add-on content services and the creation of new revenue models through building partnerships with institutions and other educational service providers. As these trends continue to unfold, we can expect to see even more entrepreneurial innovation and change in the online learning landscape.

Creative Commons (CC) license

- A **Creative Commons** (**CC**) **license** is one of several public copyright licenses that enable the free distribution of an otherwisecopyrighted work. A CC license is used when an author wants to give people the right to share, use, and build upon a work that they have created. CC provides an author flexibility (for example, they might choose to allow only non-commercial uses of their own work) and protects the people who use or redistribute an author's work from concerns of copyright infringement as long as they abide by the conditions that are specified in the license by which the author distributes the work.

Keeping MOOCs Open

- The new cohort of MOOCs are distinct from the original MOOCs in that they are "open," thus far, in only one respect: they are open enrollment. The new MOOCs have not yet openly licensed their courses. As MOOCs continue to develop course content and experiment with various business models, we think it's crucial that they consider adopting open licenses as a default on their digital education offerings. In general, the value proposition can be enhanced for the new MOOCs and their users if the MOOCs openly license their courses.

Why Open is important

- Remain in cummnity

- One goal of MOOCs is to serve tens / hundreds of thousands more people with high-quality educational content. By adopting Creative Commons (CC) licenses, MOOCs:
  - can increase the reach of their materials by making the rights to use and adapt them crystal clear from the start;
  - will be able to serve even more learners because they'll be granting legal permissions to use their course content in other educational settings; and
  - do not have to respond to individual permissions requests from users and can instead focus on delivering quality educational content to the largest number of students.

Why Open is important

- **Value Added services**

- Commercially-focused MOOCs can adopt CC licenses to make their MOOCs truly "open" (free of cost **and** free of most copyright restrictions) and still leverage the scale of these courses (with potentially tens of thousands of students) and the MOOC platform to charge for value-added services, such as the coordination of study groups, course certification, secure assessments, employee recruiting, and print-on-demand textbooks.

Why Open is important

- **Grow with community**

- MOOCs can provide features their users want by incorporating open licensing options. Recently, the education technology company Blackboard has permitted users to upload educational content under the Creative Commons Attribution license. Since many MOOCs want to support individuals who want to share their creations as well as open collaboration between course participants, it may be worthwhile for the MOOCs to support users with this easy-to-implement feature.

Why Open is important

- **MULTI LINGUAL**

- Online education knows no language barriers, and a large percentage of MOOC participants are logging on from outside of North America (where most of the new initiatives are based). For example, in a recent MIT MOOC course with 155,000 registrations, students came from 160 countries . If MOOCs want to continue to attract and serve an international audience, they might focus on multilingual course delivery. It should be noted that MOOCs that release course content under Creative Commons licenses (at least the licenses that do not contain the "NoDerivatives" condition) automatically grant permission for users to make translations of the materials. MIT Open CourseWare courses have been translated into at least 10 languages, including Spanish, Portuguese, Chinese, Thai, French, German, Vietnamese, and Ukrainian. Coursera and Udacity have already partnered with the crowdsourced captioning service Amara.

Why Open is important

- **Innovation and new pedagogical approachs**

- Openly licensed MOOC resources can give rise to interesting new courses and educational products and services. For instance, materials released under a license like CC BY can be repurposed and reused on sites like Wikipedia and hundreds of Open CourseWare projects. Adopting CC licensing can support the conditions necessary for innovation that is difficult to predict (or plan for). In the long run, supporting the open ecosystem is beneficial both for commercial and non-profit MOOC initiatives. In addition, many educators and learners want to be able to use the resources outside of the MOOC environment, and open licensing grants this permission in advance. CC licensing opens up a much broader range of pedagogical approaches that enable all MOOC participants, instructors and students alike the ability to generate, use, and share content with each other.

Why Open is important

- **Fear of stolen by competitors**

- Many MOOCs are concerned that their content will be "stolen" by competitors. However, this fear is speculative. There are features of the CC licenses that can help assuage the fears of MOOCs. For example, all the CC licenses provide for attribution to the original author, preservation of any copyright notice, and the URL to the original work. When MOOC material are licensed under a CC license permitting the creation of adaptations, the adapted resources must be clearly marked to indicate that changes have been made, and a credit — reasonable to the means and medium being used — that the MOOC material has been used in the adaptation. Also, CC licenses do not grant permission to use anyone's trademarks or official insignia, nor do the licenses affect other laws that may be used to protect one's reputation or other rights — those rights are all reserved and may be enforced separately by the MOOC. Finally, it should be noted that the original educational materials remain intact and preserved, exactly as released (most typically) on the MOOC website. So, there will be a record of the original publishing of the content. But beyond these features of the CC license, community and business norms make it very unlikely that competitor MOOCs will "swoop in" and republish full courses simply because the open license technically makes this a possibility. Norms of academic practice typically carry more weight than any legal restriction made possible through use of an open license.

How engaged are visitors to maktabkhooneh.org?

Bounce Rate	Daily Pageviews per Visitor	Daily Time on Site
25.50% ▼ 24.00%	8.20 ▲ 36.00%	7:16 ▲ 27.00%

Where do maktabkhooneh.org's visitors come from?

Search Traffic

What percentage of visits to this site come from a search engine?

Search Visits

12.50% ▼ 47.00%

Top Keywords from Search Engines

Which search keywords send traffic to this site?

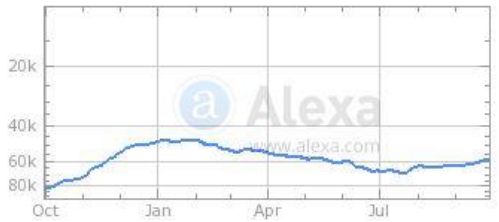
Keyword	Percent of Search Traffic
1. مکتب خانه	3.77%
2. مکتب خونه	2.38%
3. آموزش فتوشاپ	2.16%
4. آموزش پایتون	1.87%
5. مدار منطقی	1.79%

Upgrade to View

How popular is maktabkhooneh.org?

Alexa Traffic Ranks

How is this site ranked relative to other sites?



Global Rank

58,906 ▲ 7,992

Rank in Iran

1,241

امام علی (علیه السلام) فرمودند: زکات دانش، آموزش به کسانی که شایسته اند و کوشش در عمل به آن است. نهج الفصاحه، ح ۷۸۱

How engaged are visitors to sanatisharif.ir?

Bounce Rate	Daily Pageviews per Visitor	Daily Time on Site
58.70% ▲113.00%	4.15 ▼38.79%	3:20 ▼49.00%

Where do sanatisharif.ir's visitors come from?

Search Traffic

What percentage of visits to this site come from a search engine?

Search Visits

5.20% ▼69.00%

Top Keywords from Search Engines

Which search keywords send traffic to this site?

Keyword	Percent of Search Traffic
1. دبیرستان صنعتی شریف	13.88%
2. دانشگاه صنعتی شریف	8.50%
3. دانشگاه شریف	7.04%
4. دبیرستان شریف	4.79%
5. دبیرستان دانشگاه صنعتی شریف	3.53%

Upgrade to View

How popular is sanatisharif.ir?

Alexa Traffic Ranks

How is this site ranked relative to other sites?

Global Rank

122,821 ▲133,236

Rank in Iran

1,285

MOOC,s platrorm (Course Builder)

- http://www.openculture.com/2012/09/google_releases_course_builder.html
- Google is releasing the code base for Course Builder, a new open source platform that will give individual educators and universities the ability to create MOOCs of their own.

با تشکر ☺

- https://en.wikipedia.org/wiki/Massive_open_online_course#
- http://blogs.cetis.org.uk/cetisli/category/moocs/
- http://publications.cetis.org.uk/wp-content/uploads/2013/03/MOOCs-and-Open-Education.pdf
- http://creativecommons.org/tag/massive-open-online-course