MOOCs and Bite-Sized Learning: Friend or Foe?

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HELLO!

I am Ricky Kwok
This is what my team does

BTW, I'm still teaching.
Disruptive Sea?

Observations from a lookout
Threats

- UGC: Cost allocation
- Market: Competition within and beyond
- Students: Skewed
- HKU: Agility (AB, Admission)
- HR: Outsourcing
Opportunities

- Scale up and reach out via online
- Branding and pricing
- Interdisciplinary
- Global
New way to learn
New way to teach
What you need to know...
Let’s hear from the students
“Basically the teachers are reading from their lecture notes or powerpoints. We can also do that.”

https://youtu.be/kB7HiMfo5ng?t=41s
1. What to hack?

Speaking of implementing a TPg program...
Rethinking about education

**Cost**
- Scale & efficiency
- Physical infrastructure?
- Scale of audience?

**Clock**
- Speed & availability
- When do you learn most?

**Content**
- and pedagogy
- Bite-size learning?

Sharing the load that each University needs to bear

Moving from “bundled” education towards an “Education as a Service” model?

“Too tired” vs. when they are not tired

“... ridiculously slow download speed” - Elon Musk

Not challenging
- Disengaging teaching

Connectivist approach
- Peer-to-Peer
- Social Learning
2. Is MOOC the answer?

It depends...
What MOOCs are trying to address...

**Cost**
Massive Open
Scale & efficiency
35 million students

**Clock**
Online
Speed
12 major providers
E.g., edX, Coursera, 智慧樹

**Content**
Relevance
Course
4200 courses by 500+ universities and numerous industry partners

Quick facts about **Massive Open Online Courses**

- **58M** Learners
  - 23M Coursera
  - 10M edX
  - 5.3M FutureLearn

- **6850** Courses
  - 2000 Coursera
  - 1200 edX
  - 400 FutureLearn

- **700+** Participating universities and education providers

- **Business**
  - Most enrollment
    - Followed by: Computer Science, Data Science

How successful?

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CS</th>
<th>STEM</th>
<th>HHRDE</th>
<th>GHSS</th>
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<tr>
<td>Courses</td>
<td>30</td>
<td>91</td>
<td>94</td>
<td>75</td>
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<tr>
<td>Certified</td>
<td>51,343</td>
<td>44,878</td>
<td>66,217</td>
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<td>Explorers</td>
<td>171,502</td>
<td>163,235</td>
<td>163,729</td>
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<td>Participants</td>
<td>1,527,300</td>
<td>1,081,995</td>
<td>822,026</td>
<td>1,017,713</td>
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<td>Certified per course</td>
<td>1,523</td>
<td>333</td>
<td>443</td>
<td>651</td>
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<tr>
<td>Explorers per course</td>
<td>3,266</td>
<td>1,066</td>
<td>1,209</td>
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<tr>
<td>Participants per course</td>
<td>21,040</td>
<td>7,905</td>
<td>4,606</td>
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<td>% Female</td>
<td>17%</td>
<td>16%</td>
<td>47%</td>
<td>35%</td>
</tr>
<tr>
<td>% Bachelor’s</td>
<td>64%</td>
<td>63%</td>
<td>75%</td>
<td>84%</td>
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<tr>
<td>Median age</td>
<td>27</td>
<td>26</td>
<td>32</td>
<td>30</td>
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<tr>
<td>% USA</td>
<td>30%</td>
<td>25%</td>
<td>34%</td>
<td>27%</td>
</tr>
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</table>

Source: course_summary.dta

The magic of CS? STEM? What does this mean? (“HarvardX and MITx: Four Years of Open Online Courses, 2016”)

Showreel - HKU MOOCs

What I need to know...from you

http://bit.ly/TPgRetreat2017
How would you relate these terms to...

Quality

Constraints

Scale
Now, let’s do the hacking together
By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

-- Sustainable Development Goal 4.4 2015-2030, by the United Nations
What’s your problem statement?
How would you relate these terms to...

- **Quality**
  - Students
  - Experience
  - Outputs

- **Constraints**
  - Space
  - Time
  - Intended LOs

- **Scale**
  - Enrollment
  - Revenue
  - Impact
1. We have a problem.
2. We have a strategy.
3. We have a team.
4. We have collaborative spirit.
5. We have some success cases.
3. Strategy?

Think outside the box...
A Funneling model?

MOOC learners

Residential students
MicroMaster
Specialization
Professional Cert
Module
Course
SPOCs
micromasters.mit.edu
Content is king
Hong Kong’s MTR Academy aims to lure belt, road railway staff for training

European Oilfield Services Engineers (EOSE) has appointed a new director for its European operations. EOSE is an independent international company that provides a wide range of services to the oil and gas industry, including engineering, construction, and project management. The new director will be responsible for overseeing the company’s activities in Europe, working closely with clients and partners to ensure the smooth delivery of services.

To read more, visit the website of the European Oilfield Services Engineers (EOSE).


https://www.nytedu.com/
4. Team?

Technology Enriched Learning Initiative (TeLi)
Technology-Enriched Learning Initiative

Delivering high quality online learning resources

Improving e-learning infrastructure

Maximising the potential of e-learning design, analytics and development

Connecting enthusiastic educators together through e-learning
• E-learning Technologists, Instructional Designers, Multimedia Talents, (Game) Developers, Researchers, Partnership Associates, Project Managers...
• Most in their 20s or 30s; many recent graduates
• An international team
• Work in ad hoc teams/ clusters
• Fast (prototyping)
Ramping up efforts on all fronts

Single Sign On

Systems Enhancement

Gamification

Partnership Building

New way of teaching // New way of learning
5. Success Cases?

A wide range of options...
Dream big, start small

- Using Mentimeter for in-class polling (SoSc)
- Video-streaming for students overseas (Edu)
- Flipping 2-3 classes to create “quality time” for discussion (Law)
- Building a database specific to subject needs (Arts)
- Running a mega class for inter-professional team-based learning with an online system (Med)
- Building a virtual classroom using Second Life (FBE)
- DIY videos to explain concepts that require a lot of visual illustration (Sci)
- Creating a “remedial” Maths module with video tutorials and online exercises (Engg)
- Producing a MOOC to “teach the world”
- Offering a fully online curriculum
Everything online: rethinking the curriculum

- (New) outcomes
- Presentation
- Niche & Uniqueness
- Coverage
- Innovation
- Teaching-Research Nexus
- Teaching or preaching?
- Practices
- Criteria
- Feedback
- Adaptive learning
- Georgia Tech's OMS CS?
THANK YOU!

Any questions?
Scan my contact card
or email me at Ricky.Kwok@hku.hk