Developing a MOOC at Chalmers:
Motivation and first experiences from a teacher’s perspective

Matty Janssen and Christian Stöhr

January 15th, KUL 2015, Gothenburg
Will computers replace schoolteachers?

How California’s Online Education Pilot Will End College As We Know It

Free online MIT courses are an education revolution

15 July 2013 by Alison George

Is Coursera the Beginning of the End for Traditional Higher Education?

The year of the MOOC

These ‘massive’ online courses have been around for a while, but this year, more elite universities want in
Will computers replace schoolteachers?
By Gregory Ferenstein, Special to CNN

SAY MOOC ONE MORE TIME
I DARE YOU, I DOUBLE DARE YOU
A teachers perspective on MOOCs:

- Chalmers and MOOCs
- Motivation and expectations
- Pedagogic idea
- First experiences
Why MOOCs at Chalmers?

• Branding of global significance
  ─ Areas of Advance
  ─ Sustainability
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• Open up education for a global audience (3rd mission)
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• Open up education for a global audience (3rd mission)

• Build up further experience at Chalmers in developing, implementing and evaluating MOOCs
The development has started…

Introduction to Graphene Science and Technology
(March 23rd 2015)

Sustainability in Everyday Life
(June 2015)

two more
There is support...

course design and pedagogic support

technical production support

Edx platform support

administrative support

marketing support

legal issues & CR support

documentation
There is support…

- course design and pedagogic support
- technical production support
- Edx platform support
- MOOC Teacher(s)
- administrative support
- marketing support
- legal issues & CR support
- documentation
The very early days

• How did we learn about the MOOC initiative?
  – Open call
  – Information seminar

• Why did we decide to apply?
  – An interesting opportunity
  – Sounded like fun
  – Teach “the man in the street”
The proposal: “Sustainability in everyday life”

- Targeted audience → The informed citizen
- We have defined so-called hotspots

  - Climate change
  - Energy in society
  - Chemicals in society
  - Food
  - Globalization

- Overall learning outcomes → Systems thinking, citizen stewardship
Motivations for the proposal

• "Man in the street" → "Informed citizen"
• Topics → Survey of news sources
• The funnel
  – Modular design
  – MOOCies can choose how deep to go into the course material
  – But, requirements need to be met to pass the course
• Systems thinking → Everything is connected
Expectations beforehand

• To try something new, and be creative
• To not design yet another MOOC
• To explore and learn about the possibilities offered by MOOCs
  — On-line
  — On-campus
What have we done to date?
Expectations met so far

• We are actually doing something different
• It is a very creative process
• Steep learning curve

But...
• The real implementation still has to start
• Challenges during more detailed design
  — Mini-lectures
  — Assessment
Latest scribblings on MOOC design

Citizen Stewardship 7–8 weeks

Critical issues:
1. Describe cause effects of run system thinking stewardship
2. Explain concept
3. Apply to everyday life
Challenges during more detailed design

• Mini-lectures
  - Different formats
  - Length of lectures
  - Ethos, logos, pathos

• Assessment
  - Different formats
  - Peer assessment (or not)
  - Design of the final exam
Thank you!
