DESIGNING A FRAMEWORK FOR MAKING USE OF MOOCS

Deacon, A.; Small, J.; Walji, S.;

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Designing a framework for making use of MOOCs

Andrew Deacon, Janet Small, Sukaina Walji
University of Cape Town
Action Lab - Introduction

• What are MOOCs?

• UCT MOOCs Project as conceived
  • Course landscape in higher education
  • Goals for use

• UCT MOOCs Project experiences
  • UCT MOOCs portfolio
  • Use MOOCs

• Why design a framework for use?
What are your experiences?

• What do your mean when you refer to a MOOC?
• How many MOOCs have you enrolled for?
• Have you taken a MOOC that openly licences material?

URL: menti.com
Code: 38 65 10
What are MOOCs?

Massive Open Online Courses are a prominent form of free or low cost course offerings, but not necessarily realizing the traditional vision for open education.
Massive

- Have many thousands participant

Open

- Open to anyone with an internet connection

Online

- Everything is online

Course

- Course is organised to support learning
MOOCs occupy ‘in between’ spaces which are neither formal nor informal but draw on both the skills of formal learning and the informal identities that have a kind of authenticity (Farrow, 2014)

UCT MOOCs Project as conceived

Understanding the higher education landscape.
Intentions and goals for supporting open education and reuse.
UCT MOOCs Project

• To develop 12 MOOCs

• To research educators’ open educational practices
COURSE LANDSCAPE OF HIGHER EDUCATION

- **Conventional**: Lectures, Block release, Online courses
- **Flexible**: Short courses, Professional development courses, MOOCs

**FORMAL** (credit):
- Lectures
- e.g. most degree programmes

**SEMI-FORMAL** (certificate):
- Short courses
- Professional development courses
- e.g. Short courses
- Global Citizenship
- Write Science courses

**NON-FORMAL** (no credit):
- Summer school
- MOOCs
- e.g. flip class

Curriculum integration
Showcase teaching and introduce topics with high-profile ‘rockstar’ presenters.

Introduce fields and support students in undergraduate study.

Develop skills and introduce topics for postgraduate study.

Showcase research and special interest topics of interest to postgraduate level.

Showcase professional careers for continuing education and qualifications.

Within the Higher Education Landscape

Outwardly focused showcase courses

Inwardly focused gateway and transition courses
MOOC platforms & university partners

Around 250 universities have partnered with these three MOOC platform:

- **UCT** - Coursera & FutureLearn
- **Wits** – edX
- **Stellenbosch** – FutureLearn
Goals of UCT’s MOOC project

• To **showcase** the teaching and research excellence of UCT
• To **give exposure** to African content and knowledge
• To **profile** key postgraduate programmes and research areas aligned with the university’s strategic goals
• To **support** students in academic transitions
• To **make UCT’s knowledge resources globally accessible**
• To **develop models and expertise** in online learning that could be deployed in mainstream degree programmes
What are your experiences?

• Have you been part of a MOOC course creation team?
• How was the material licenced?

• Have you been part of a formal online course creation team?
• How was the material licenced?
UCT MOOCs Project experiences

Understanding the higher education landscape. Intentions and goals for supporting open education and reuse.
UCT MOOC learners

- Coverage
  - Geographical reach
  - Education level
  - Employment and sector
  - Gender and age profile

- Participation
  - Discussion comments

- Achievement

- Quality
Enrollment by continent

Europe 48%
Africa 20%
Asia 16%
Oceania 4%
South America 6%
North America 6%

42% from Africa, Asia and South America

Source: enrolment in What is a Mind?
Licencing of materials in UCT MOOCs

© University of Cape Town CC-BY

- Wrapped (e.g., with additional student essay)
- Reused materials (e.g., to show videos in class)
- Translated (e.g., into Spanish)
What are your experiences?

Have you made use of MOOC materials in your teaching?

Relationship between MOOCs and OER?
Why design a framework for use?

Anticipating and encouraging reused is central to open education
Educators’ open educational practices

• A subproject of the Research on Open Educational Resources for Development (ROER4D) Impact Studies call

• Research question:
  How does MOOC making with OER adoption influence educators’ OEP?

• Rationale:
  • In a MOOC context, what can ‘open’ mean and how can it be valued?
  • What are the implications for institutions in promoting openness?
  • What does a MOOC format contribute?
Perspectives on MOOC use

Participants

What MOOCs exist and why might I want to do a MOOC?

Educators

How can I use and develop MOOCs? Why are MOOCs useful?

Support staff

What is there to learn from MOOCs?
Why do we need a framework

• MOOCs as an opportunity in informal – formal teaching & learning space
• Leverage considerable investments made and spread risk
• MOOCs as resources for re-use and re-contextualisation
• Understanding models of re-use helpful

Our perspective is of educators and learning designers wanting to understand MOOCs and MOOC use ecosystem – there may be other perspectives!!
MOOC use framework

Making use of MOOCs: opportunities

Creating new course modes

Five Categories
- Teaching showcase
- Gateway skills
- Graduate literacies
- Professional development
- Research showcase

UCT 5 MOOC categories

Re-use/Adaption model: MOOC MATERIALS RE-USE

Providing new materials

‘ADD IN’:
- use MOOC as source of to create own course
- use materials as is
- adapt materials/localise

‘ADD ON’:
- use MOOC OER to supplement/add on to own course materials
- use materials as is

Re-use/Adaption model: WHOLE/PART MOOC RE-USE

Supporting new pedagogical strategies

- Authentic learning with diverse audiences
- Promote interdisciplinarity
- Active learning through FLIPPING CLASSROOM
- Support students in transition through BRIDGING MOOCs
- Opportunity for alternative ASSESSMENT/CREDIT
Create a MOOC

Creation model within MOOC use framework, including examples
Creating a MOOC:

**PURPOSE**

Educators' purposes fall into 5 categories/purposes of why they might offer a MOOC:

- Teaching showcase
- Gateway skills
- Graduate literacies
- Professional development
- Research showcase

Maximises educator’s ability to integrate into other teaching and to reuse

**PROCESS**

1. Create/build a MOOC
2. Monitor MOOC and make changes
3. Employ/use mentors or facilitators in MOOC to help teach students
4. Monitor and evaluate

Ongoing commitment!!

**ENABLERS**

- Full control over pedagogical design, scheduling and selection of content
- Institutional IP policy informs MOOC licensing
- Plan for re-use from beginning

**CONSTRAINTS**

- Costly endeavour – time and resources
- Content may not be suitable for other contexts
- Time taken to adapt and create assessments that align and tailor to MOOC content
- Self-study likely to lead to non-completion
MOOC materials re-use

Re-use/Adaptation model within MOOC use framework, including examples
MOOC use framework

**Creation model:**
CREATE A MOOC

**Making use of MOOCs: opportunities**

**Re-use/Adaptation model:**
MOOC MATERIALS RE-USE

**Re-use/Adaption model:**
WHOLE/PART MOOC RE-USE

**providing new materials**

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**creating new course modes**

Five Categories
- Teaching showcase
- Gateway skills
- Graduate literacies
- Professional development
- Research showcase

UCT 5 MOOC categories
Re-use/Adaptation model: MATERIALS RE-USE

**PURPOSE**

MOOCs provide OER materials

‘ADD IN’:
- use MOOC as source of to create own course  
- use materials as is  
- adapt materials/ localise

‘ADD ON’:
- use MOOC OER to supplement/add on to own course materials  
- use materials as is

**PROCESS**

Select materials

Download materials

Apply and adhere to Creative Commons licensing conditions

Localise and re-license if necessary

**Enablers**

Creative Commons licences enable re-use  
Access to huge range of materials in multiple formats  
Technical affordances of MOOC platform enable downloading  
Inspiration from seeing how materials are used in context

**Constraints**

Pedagogical intentions of materials not known so out of context  
Materials take time to find localise and adapt  
Not all MOOC materials are CC licenced so may need to ask for permissions  
MOOC platforms may impose licensing and re-use restrictions
UCT is committed to encouraging open access with regard to scholarly communication and education. Where possible we have released our course content under a Creative Commons licence.
How prevalent is materials re-use in MOOCs?

Have you imagined re-using material from this course in your own context?

Did the open licensing enable you to make use of the course material?

Source: post-course survey in Climate Change Mitigation in Developing Countries
If you have made use of the course materials please specify how...

<table>
<thead>
<tr>
<th>Options</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>For inspiration for teaching the topic in my own context</td>
<td>40%</td>
<td>15</td>
</tr>
<tr>
<td>By downloading and using videos or other resources for an informal or supplementary learning experience</td>
<td>37%</td>
<td>14</td>
</tr>
<tr>
<td>By downloading and using videos or other resources for a formal learning program</td>
<td>11%</td>
<td>4</td>
</tr>
<tr>
<td>By prescribing the course or parts of the course as part of a learning experience for students or colleagues</td>
<td>16%</td>
<td>6</td>
</tr>
<tr>
<td>By setting up a study group/ facilitated group to work through the course or some of the materials collaboratively</td>
<td>11%</td>
<td>4</td>
</tr>
<tr>
<td>By making use of links or readings which were suggested on the course</td>
<td>55%</td>
<td>21</td>
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Source: post-course survey in Climate Change Mitigation in Developing Countries
Whole/part MOOC re-use

Re-use/Adaptation model within MOOC use framework, including examples
MOOC use framework

Making use of MOOCs: opportunities

Creation model: CREATE A MOOC

Creating new course modes

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UCT 5 MOOC categories

Re-use/Adaptation model: MOOC MATERIALS RE-USE

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- Support students in transition through BRIDGING MOOCs
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Making use of MOOCs: educator pedagogical intentions

Re-use/Adaption model: WHOLE/PART COURSE RE-USE

**PURPOSE**
MOOCs as supporting various pedagogical strategies:
- Support authentic learning through diverse audience
- Promote interdisciplinarity and exposure to community
- Active learning through FLIPPING CLASSROOM
- Plug gaps or support students to transition through BRIDGING MOOCs
- Provide opportunity for additional/customised assessment or credit

**PROCESS**
PRESCRIBE for self-study - students study in own time or as part of course but flexibly

WRAPPING: set up facilitated study groups - students are supported by physical space, time to meet and with a facilitator

AFFILIATE/PARTNERSHIP models - set up of a parallel course with localised content and localised assessment

**Enablers**
Whole/part course re-use enables pedagogical wrapping/teaching/support/scaffolding

MOOC platform design encourages keeping on track

Massive and diverse community can be a learning experience - "learning with the world"

**Constraints**
Time taken to find & recommend appropriate MOOCs

Content may not be suitable for local contexts

Time taken to adapt and create assessments that align and tailor to MOOC content

Self-study likely to lead to variable completion
If you have made use of the course materials please specify how...

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Source: post-course survey in Climate Change Mitigation in Developing Countries
Applying the MOOC use framework

Some example to illustrate the MOOC use framework
UCT Office for Postgraduate Studies

Office for Postgraduate Studies
Workshops, seminars and open online courses for UCT postgraduate students

Category & Campus Filter (23)

April 2016

- Public Holiday - Family Day
- 9am Navigating Research Writing
- 9am Navigating Research Writing
- 9am Navigating Research Writing
- 9am Navigating Research Writing
- 1pm Postgraduate Studies Open House
- 1pm Introduction to EndNote for Mac - HSL Research Lecture Series
- 1pm MOOC: Scholarly Communication [Science, Health, Science and Engineering]
- 5pm MOOC: Questionnaire Design for Social Surveys
- 2pm Writing about research in plain English
- 5pm MOOC: Introduction to Public Speaking
- 5:30pm Introduction to Mendeley - HSL Research Series

More Calendars
Browse by Event Organizer
- Office for Postgraduate Studies
Understanding Clinical Research: Behind the Statistics

**About this course:** If you’ve ever skipped over the results section of a medical paper because terms like “confidence interval” or “p-value” go over your head, then you’re in the right place. You may be a clinical practitioner reading research articles to keep up-to-date with developments in your field or a medical student wondering how to approach your own research. Greater confidence in understanding statistical analysis and the results can benefit both working professionals and those undertaking research themselves.

If you are simply interested in properly understanding the published literature or if you are embarking on conducting your own research, this course is your first step. It offers an easy entry into interpreting common statistical concepts without getting into nitty-gritty mathematical formulae. To be able to interpret and understand these concepts is the best way to start your journey into the world of clinical literature. That’s where this course comes in - so let’s get started!

The course is free to enroll and take. You will be offered the option of purchasing a certificate of completion which you become eligible for, if you successfully complete the course requirements. This can

Financial Aid is available for learners who cannot afford the fee. Learn more and apply.

Go to Course

Already enrolled
Understanding Clinical Research

Self-Learning

Scientific advances mean that we will all have to be life-long students, and one of the key skills you will need as a specialist health professional is self-learning. While there admittedly is a lack of face-to-face continuing education programmes in South Africa, we do have access to the wealth of online courses and training opportunities - many of which are available completely free of charge. But online courses are difficult to complete - not because of the material or format, but because of our hectic lifestyles! Many of us enrol in online courses, follow a few lessons, and then get busy with other things and never find the time to complete the course. It is almost like gym, but for your brain.

Statistics - popular options

Understanding Clinical Research: Behind the Statistics
by Prof Juan Klopper from UCT Dept of Surgery (create a Coursera account)

About this course: If you've ever skipped over the results section of a medical paper because terms like "confidence interval" or "p-value" go over your head, then you're in the right place. Greater confidence in understanding statistical analysis and the results can benefit both working professionals and those undertaking research themselves.
Origins: Developed out of an existing taught masters course

Reuse: Used as a flipped classroom for part of the taught masters course

The Discipline of Death

In her second talk, Deborah explores the journey taken by medical professionals as they become familiar with the intimate details of death and dying. Dissection and autopsy are the means by
Flipped classroom model
Education for All: Disability, Diversity and Inclusion

Join this free online course to find out how inclusive education can work, especially where resources are limited.
What is a mind?

What are you if not your mind?

By asking the question, ‘What are you - if not your mind?’, some fundamental questions are being raised. The mind is studied implicitly and explicitly by a range of different disciplines. The focus varies from the anatomical and physiological scene of action in neurosciences to the societal questions about being human in the Humanities. Yet on their own, none of these single disciplinary perspectives has a completely satisfactory response to the question, ‘what is a mind?’.

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**Prescribed** by a South Korean university for its own students for credit where educator marked student essays

**Offered as a formal on-campus course** at UCT and **taught by other staff members** to Semester Abroad students using a private version of course on FL platform

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What is a Mind? – Aimee Dollman and Dr Ross Balchin

This question has perplexed philosophers, scientists, historians and ordinary people across time and cultures. While advances in the medical understanding of how the brain functions can shed light on neurological functions and disorders, the essential question of what the mind is speaks to a different problem. This problem cannot be answered by a purely scientific understanding of the brain, nor by a purely philosophical or psychological approach. Many disciplines have attempted to address the question, resulting in multiple and sometimes antithetical answers.

In this course you are invited to explore pertinent scientific and philosophical concepts for understanding our own minds. “What is a Mind?” adopts a multidisciplinary approach to explore four defining properties of the mind – subjectivity, consciousness, intentionality and agency. These four properties are used to help us think about the fundamental questions: what it to be a mind, why we have a mind and what it feels like to have a mind.

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**About Aimee Dollman**

Aimee is a senior postgraduate student in the Department of Psychology at UCT. She is currently completing her PhD in the department. She has graduated with an MA in Neuropsychology from UCT. Her current research involves visuospatial cognition, and she is investigating a rare visuospatial disorder as part of her PhD. She also has research interests in traumatic brain injuries (TBI), with her Master’s research focused on academic and behavioural outcomes in children following severe TBI.

**About Dr Ross Balchin**

Ross currently teaches the first year students in the Neuropsychology Master’s programme at UCT. He also works with the Neuropsychology Foundation in New York as an independent contractor. He has held National Research Foundation and Claude Leon Foundation postdoctoral fellowships and is also a former honorary research associate in UCT’s Division of Neuroradiology. Ross has research collaborations in the areas of depression, traumatic brain injury and the effects of radiation-based therapies on neurocognitive functioning. He is particularly interested in cross-cultural neuropsychology and in addressing the challenges associated with developing culturally fair and appropriate materials for clinical assessment.
Becoming a changemaker: Intro to social innovation

Wrapped as a facilitated class by an individual funded by NGO for local students

Students offered In-person environment to study the MOOC in an IT enabled facility with on-hand facilitators

Strandfontein facility for social innovation MOOC
Thursday, 17 November 2015

The Bertha Centre for Social Innovation and Entrepreneurship at the UCT Graduate School of Business has teamed up with social enterprise organisation Reconstructed Living Labs (RLabs).

They are running a free online course, Becoming a Changemaker: Introduction to Social Innovation, for people who want to become social entrepreneurs in their communities.

The course is presented online but, unlike most online programmes, it also has a classroom-based facility in Strandfontein, Cape Town.

"The Strandfontein venue is really a place where people can come to connect, to brainstorm ideas and do the course online," says Marlon Parker, founder of RLabs and one of the convenors of the course.
Activity #1

• Review framework and add any examples from any of the categories

• Collect examples
Activity #2 Group activity

Think of how you might use a MOOC for your own teaching or learning
Use the framework as a guideline:

• What would you need to consider?
• What would need to be in place?
• How important is licensing?
Examples of materials re-use

• **Education for All**: Staff at a hospital downloaded videos and showed them in a group meeting where to stimulate discussions on disabilities in their context.

• **What is a mind?**: Other educators requested to use videos in their own courses;

• **Intro to social innovations**: Use of video materials to run workshops for schools.

But nature of materials re-use is that we don’t know what is being re-used as materials can be downloaded by individual learners.
Examples of whole/part MOOC use

- **What is a Mind?** - Another university required its students to take this MOOC and then write an additional essay for which they would be awarded credit.

- **What is a Mind?** – taught as a formal course for UCT Semester Abroad students

- **Understanding Clinical Research** which is recommended to MMEd students enabling them to start with their research projects

- **Medicine & the Arts** course run as a flipped classroom by educators

- **Postgraduate Office at UCT** offers facilitated MOOCs for personal, professional and skills development

- **Climate Change Mitigation in Developing countries**: where educators are directing applicant to Master’s so as to help decision making about suitability for Master’s study

- **Social Innovations**: wrapped by a study group in Egypt as part of a

- **Social Innovations**: run as a blended course in a Rlabs educational facility in resource deprived community

- **CopyrightX affiliate version at UCT**: where UCT students study localised version of HarvardX. Certification is available to these students
Project References


