

MOOCS, OPENNESS AND CHANGING EDUCATOR PRACTICES: AN ACTIVITY THEORY CASE STUDY

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MOOCs, openness and changing educator practices: an Activity Theory case study

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Centre for
Innovation in
Learning and
Teaching



Context

- Global South low producers of OER
 - Participate relatively minimally in open learning and teaching
- Emerging culture of enabling openness at UCT, open agenda
 - Cape Town Open Declaration 2008; Berlin Declaration 2011; Open Scholarship; OERUCT; OpenUCT
- UCT MOOCs project (3 years, 12 MOOCs)
- Grantee of ROER4D Impact Study (Sub-project 10.3)

Links

UCT MOOCs: <http://www.cilt.uct.ac.za/cilt/moocs-project-uct>

ROER4D Sub-project 10.3: <http://roer4d.org/sp10-3-impact-of-oer-in-and-as-moocs-in-south-africa>

UCT MOOCs project



**Medicine and the Arts:
Humanising Healthcare**



What is a Mind?

One of first major MOOC initiatives in Africa

Partnership with FutureLearn and Coursera

12 MOOCs+ over 3 years

Intention for OER outputs of MOOC materials

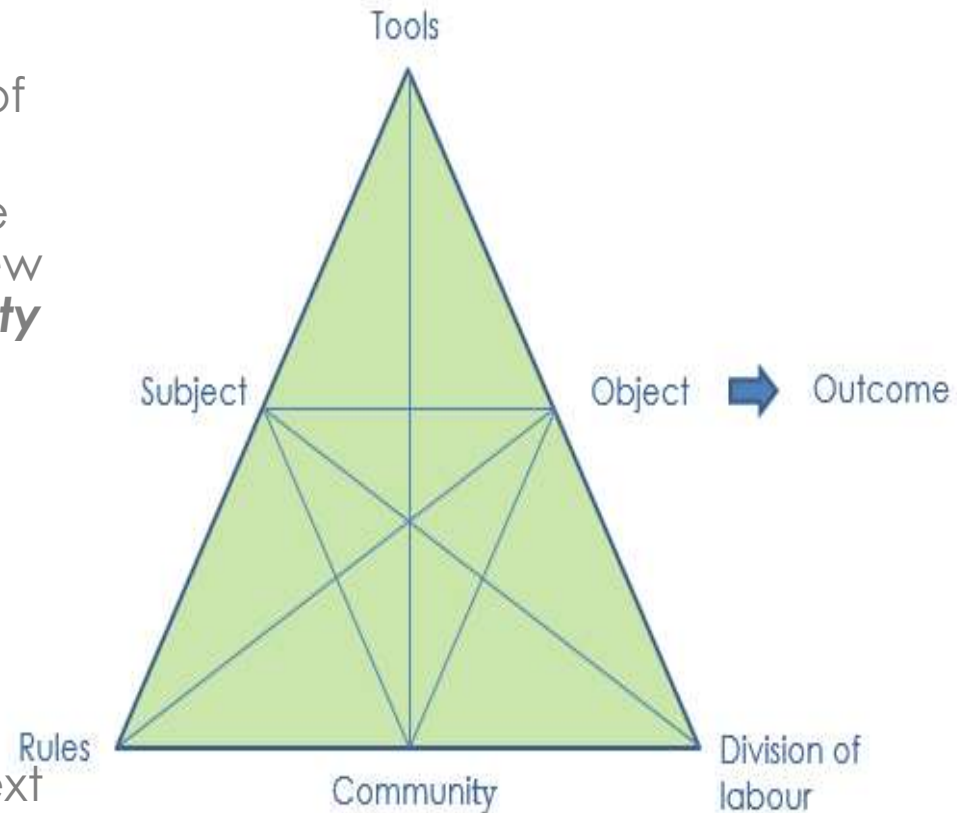
First 2 MOOCs on FutureLearn platform launched and currently re-running.

Question

How do educators' practices change when using (or not using) OER in and as a MOOC?

Conceptual framework

- Activity Theory (Engeström 1987)
 - tools, rules, community, division of labour, object
 - 'Subjects' (lead educators) strive towards 'object' (developing new interdisciplinary field) in an **activity system**
 - Activity systems are object-directed
- Context is not just 'out there' (Nardi 1996)
 - Mental processes and acts inextricably entwined with context
- Locate educators' practices and perceptions in context of mediating artefacts



Conceptual framework

- Activity Theory as heuristic to thickly describe changes in educators' practices and perceptions
- Explanatory device to capture change and 'contradictions' as sites of change/adaption/innovation
- Captures system in which educators strive for/consider their object
- Examine effect of adding two new tools:
 - Creative Commons (CC) licenses
 - MOOC platform (broadly conceived)

Methodology

- Case study analysis
- Insert educator 'subjectivity' into analysis, via:
 - open-ended semi-structured interviews
 - post-MOOC reflection focus groups
- Theory framed analysis
- Code according to Activity Theory nodes, openness, emerging themes

Methodology

- Interviews *before* MOOC, immediately *after*, 6 months *later*
- Interviewees: 2 MOOC lead educators + 13 guest educators
- *Longitudinal* (change over time)
- **For this analysis we examine one MOOC at two time intervals (before and immediately after)**

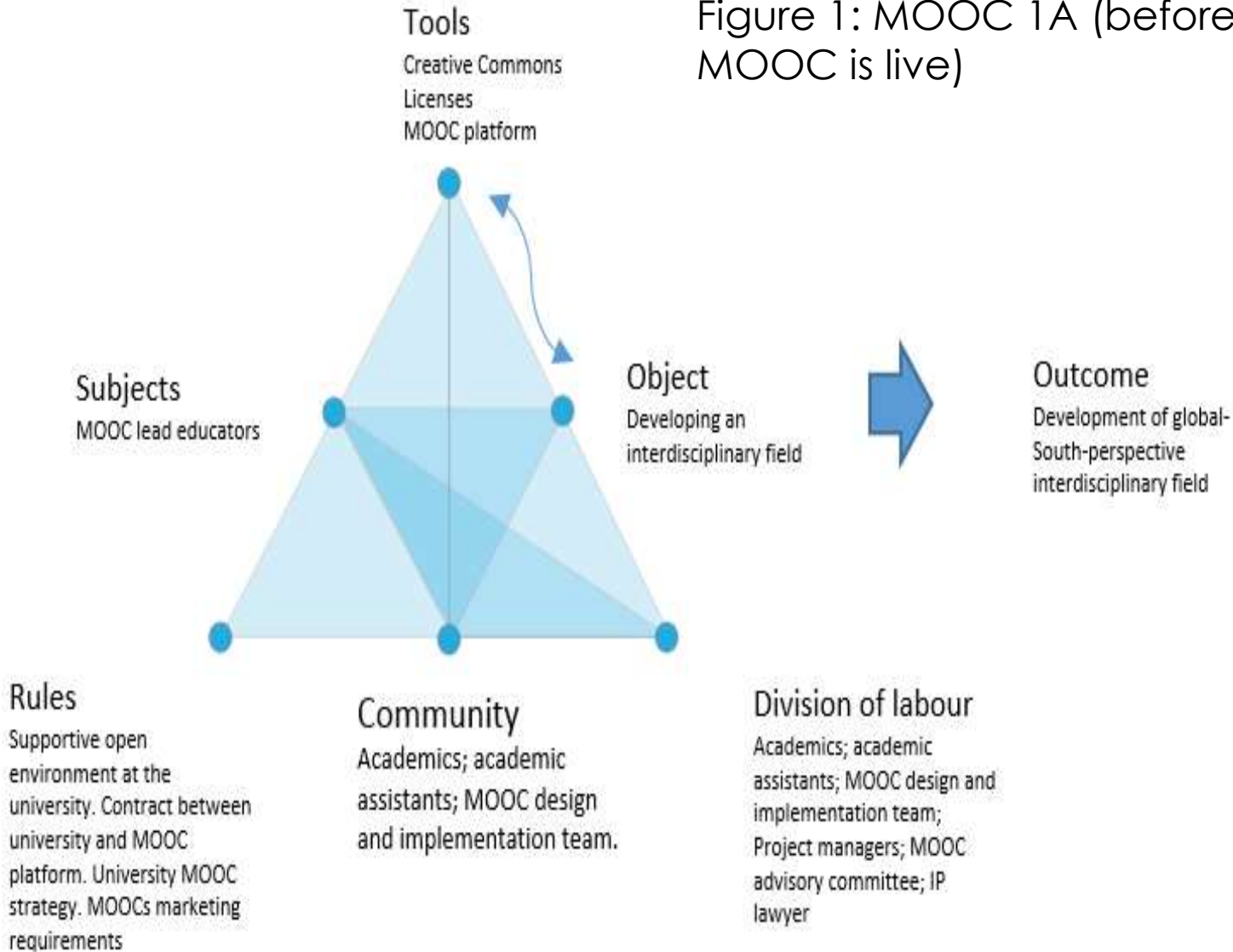
Findings

Tool node mediates subjects' (lead educators) striving toward object; we found that educators:

- 1) Engaged with the role of OER and openness in MOOCs
- 2) Perceived affordances of the MOOC format
- 3) Reflected on educational practices in different contexts

Activity System 1

Figure 1: MOOC 1A (before MOOC is live)



Activity system 1

Understandings of OER/Perceived role of openness

Nascent understanding of OER

- Two of 14 educators familiar with OER or broad open movement
- Understandings of openness general: *“it’s free for everybody and open access”* (LF)
- None of the 14 academics articulated a relationship between intellectual property copy right and CC licenses and how the latter can transform educational resources into OERs.
- Interviews revealed that educators did not create OER for the MOOC (or transform the MOOC into an OER) for ideological or theoretical reasons.
- Majority positive about open character of MOOC

Activity system 1, themes

Understandings of OER/Perceived role of openness

Access to knowledge which is “*all nicely packaged into tertiary institutions and never goes anywhere*”
(ML)

MOOC serve as “*social responsiveness*” to communities and continent (ML)

Access to academics

Access and reach beyond conventional university setting

Activity system 1, themes

Affordances of the MOOC

Tentative understandings of what MOOCs might do

“one step in the right direction” (LE1) to *“build mass critical thinking”* (LE1) and start a *“conversation”* (LE2) about their interdisciplinary field

MOOC accessibility as *“opportunity”* to *“find new collaborations around the world”* (LE2)

“unless you put something out there you’re not going to create new links” (LE2)

Absent entry requirements, MOOC could act as *“sort of levelling platform”* (LE2)

MOOC constitutes a tangible *“archive of an idea”* (LE1)

Activity system 1, themes

Reflection on educational practices

“You’ve got seven minutes to put across maybe a whole range of complex ideas, you have to think about each word, each phrase, each sentence, you have to script it quite carefully, you have to engage people” (LE2)

Activity system 1, themes

Reflection on educational practices

Reflection on course design:

“[I]n terms of structure... the MOOC, because of the framework, has given me some new skills after 20 years of doing this, to think about how to structure assignments, students’ engagement with the lectures, so that’s also been really helpful.” (LE1)

Activity system 1, themes

Reflection on educational practices

Developing the MOOC had taught her/him
*“how to start thinking about bridging online and
offline”* in her/his teaching (LE1)

Brought home the *“significance of building an
archive”* which would permit global access for
their new field (LE1)

Activity System 2

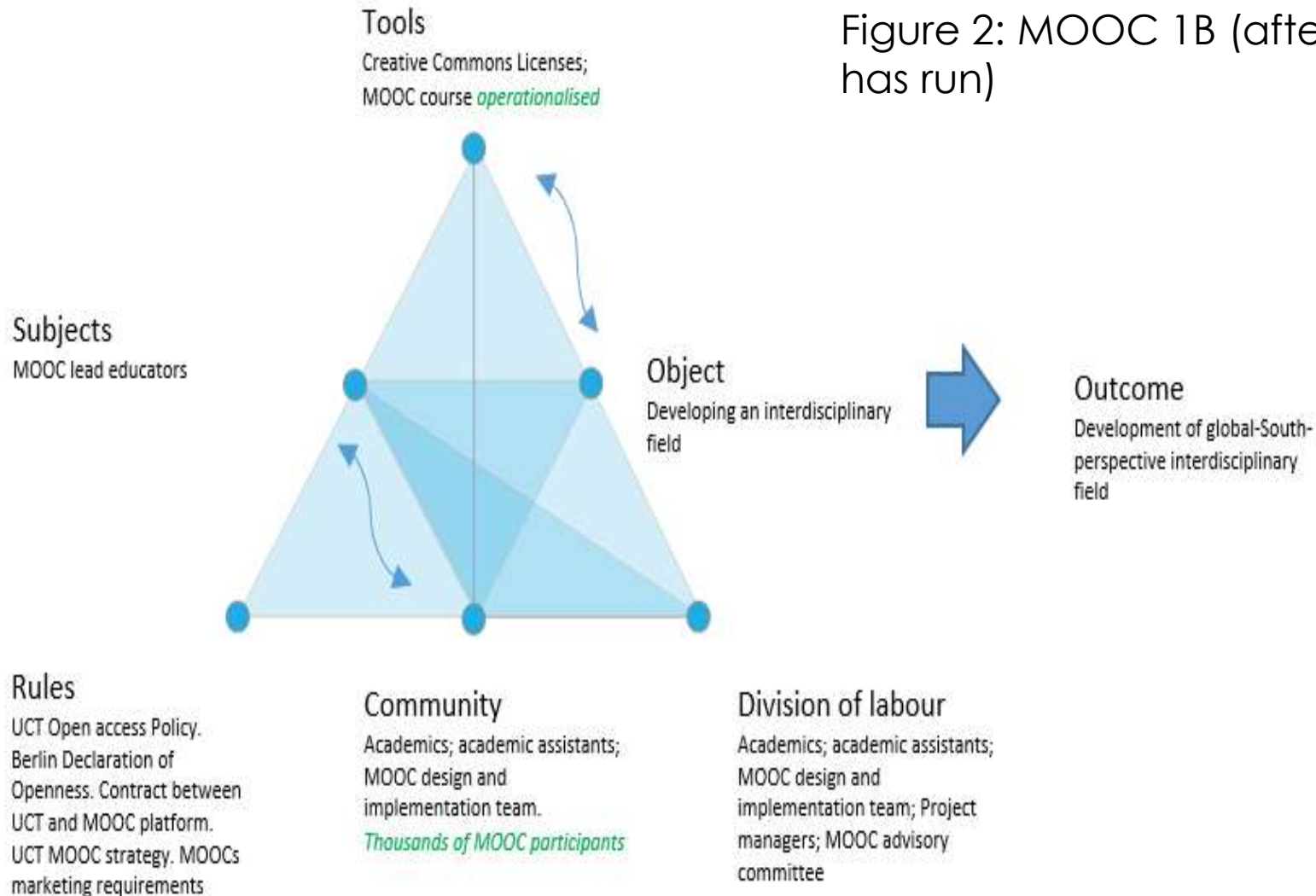


Figure 2: MOOC 1B (after MOOC has run)

Activity System 2

Two significant differences between the first and second activity systems

- 1) MOOC and its OER components are operationalised, i.e., the course has gone live and has run its six week duration
- 2) Thousands of new participants (MOOC learners) have entered the community node of the activity system

Activity system 2, themes

Understandings of OER/Perceived role of openness

Understanding of openness as reach and access

MOOC's global open reach enabled personal and intellectual “*synergies*” between participants (LE1)

For developing new field, MOOC is more effective than “*even the biggest conferences*” where it's a “*relatively small audience that you reach*” (LE2)

Ideas in MOOC received and reflected in a wide diversity of contexts (which university can't achieve) (LE2)

Activity system 2, themes

Affordances of the MOOC

Participation and contribution of MOOC participants

MOOC fostered “*bi-directional*” learning with “*many people offering useful readings, links, poetry, Youtube clips etc.*” (HM)

LE2: “*I felt more and more like a learner and less and less like a teacher. I was learning as much from people’s comments as anybody else – - I was fascinated to see the interpretations that people brought the other resources that people brought, the perspectives that they brought that enhanced what we had put out there*”

Activity system 2, themes

Affordances of the MOOC

Participation and contribution of MOOC participants

As participants add content the archive *“builds itself up”* (LE1)

“profundity of space” for fostering wide community, which one *“cannot achieve in a university classroom”* (LE1)

MOOC was able to *“tap into deep reservoirs of people’s interests”* (LE1)

Activity system 2, themes

Affordances of the MOOC

Depth and quality of engagement

MOOC enables “*depth of engagement*” (LE2)

“If I could get that level of engagement from all my students it would be amazing” (LE2)

“I see the potential of deep learning online where you never meet the participants face to face” (LE2).

LE2 convinced that *“the online space was just as deep and in some cases a lot more intimate than a classroom space, a face to face space”* (LE2)

Activity system 2, themes

Affordances of the MOOC

Power relations and reuse

Global accessibility, no entry requirements made learning environment more “flat” and “egalitarian” (LE2)

MOOC’s afterlife: use for classroom teaching and “spawning new research ideas” (LE1)

Activity system 2, themes

Reflection on educational practices

Focus attention on content presentation

Reconsider offering same lecture “40 times”, educator “*probably a bit tired by now*” (LE2)

“*whereas if I thought about it in the way we did with the MOOCs and set it up and scripted it and thought about exactly what I really want to emphasise here and what questions did I want to ask, I’d have a more engaged student response - I’m sure I would... it’s about the preparation of the material and the presentation of it*” (LE2)”

Activity system 2, themes

Reflection on educational practices

Formation of learning communities

“There’s something about the formation of a community, and the irony is that it seemed to have congealed in a more palpable way on the MOOC site, than it does in my face to face teaching” (LE1)

Activity system 2, themes

Reflection on educational practices

New ideas for traditional face-to-face teaching

- Opportunities for social media use in face-to-face teaching *“So it’s alerting you to a, kind of, a research agenda, but...and at the same time, to the possibility of a social media for teaching”*. [LE1]
- LE1 wanted to *“try and see if what I’ve learnt from the MOOC, in terms of the significance of community, and really, sharing of stories, can somehow build that back into our undergraduate teaching”*.
- Use components of the MOOC as a *“springboard”* for classroom teaching .(LE1)

Concluding remarks

Activity theory useful conceptual framework for tracking educator practices in “authentic contexts” (Porter 2013)

AT enabled thick description of educator’s changing perceptions of

- Affordances of the MOOC
- The role of Openness

Allows us to track educators’ reconceptualisation of face-to-face teaching and intent to change practices

References

- Barab, S. A., Barnett, M., Yamagata-Lynch, L., Squire, K., & Keating, T. (2002). Using activity theory to understand the systemic tensions characterizing a technology-rich introductory astronomy course. *Mind, Culture, and Activity*, 9(2), 76-107.
- Beetham, H., Falconer, I., McGill, L., & Littlejohn, A. (2012). JISC open practices: Briefing paper.
- Dippe, G. (2006). The missing teacher: Contradictions and conflicts in the experience of online learners. In *Fifth International Conference on Networked Learning 2006* (pp. 8-pages).
- Engeström, Y. (1987). *Learning by expanding: An activity-theoretic approach to developmental research*. Helsinki: Orienta-Konsultit Oy.
- Hardman, J. (2005). An exploratory case study of computer use in a primary school mathematics classroom: new technology, new pedagogy?: research: information and communication technologies. *Perspectives in Education: Research on ICTs and Education in South Africa: Special Issue 4*, 23, p-99.
- Murphy, E., & Manzanares, M. A. R. (2008). Contradictions between the virtual and physical high school classroom: A third-generation Activity Theory perspective. *British Journal of Educational Technology*, 39(6), 1061-1072.
- Murphy, E. & Rodriguez-Manzanares, M. (2014). *Activity Theory perspectives on technology in higher education*. Hershey, Pennsylvania: IGI Global.
- Nardi, B. A. (1996). Studying context: A comparison of activity theory, situated action models, and distributed cognition. *Context and consciousness: Activity theory and human-computer interaction*, 69-102.
- Nelson, C. P., & Kim, M. K. (2001). Contradictions, Appropriation, and Transformation: An Activity Theory Approach to L2 Writing and Classroom Practices. *Texas papers in foreign language education*, 6(1), 37-62
- Peruski, L., & Mishra, P. (2004). Webs of Activity in Online Course Design and Teaching. *ALT-J: Research in Learning Technology*, 12(1), 37-49.
- Porter, D. A. (2013). *Exploring the practices of educators using open educational resources (OER) in the British Columbia higher education system* (Doctoral dissertation, Education: Faculty of Education).