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## Goal-setting behaviour in Massive Open Online Courses (MOOCs)

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# Goal-setting behaviours in Massive Open Online Courses

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Paper session: Self-Regulated Learning  
Date: Wednesday 28th August Time: 09:00 - 10:30  
Session Number: D 22 Location: r\_0670

# Introduction

- MOOCs and Professional Learning
- SRL and Goals
- Study context, participants and method
- Results
- Reflection on implications, limitations and future work

# Professional Learning

- Knowledge intensive industries
- Knowledge creation
  - (cf learning by acquisition or participation)
- Organisational approaches less effective
- Learning is increasingly informal
- Shift in responsibility to the learner

# Massive Open Online Courses

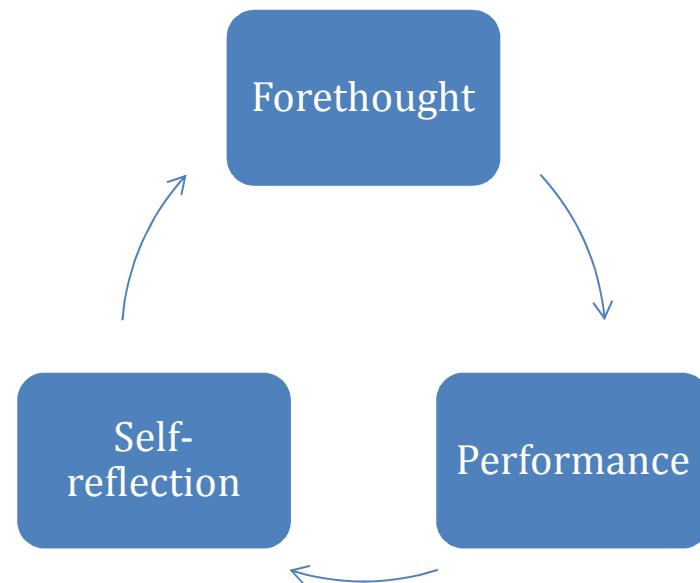
- M O O C
- Roots in '*connectivism*'
- Informal, non-formal
- Shift to learner control, peer learning
- 2011-12: Business Models (xMOOCs)
  - Udacity, edX, Coursera and FutureLearn

# MOOCS x Professional Learning

- Expand learning network beyond traditional horizons
- Focus on enabling learning
- Diminished role for teacher
- Greater autonomy for learner
- Learner as contributor
- Demands skills to participate effectively: to self-motivate, to manage their learning

# Social cognitive model of self-regulation (Zimmerman, 2000)

- Self-regulation is the ‘self-generated thoughts, feelings and actions that are planned and cyclically adapted to the attainment of personal goals’



# Research Questions

- Overall aim of study:
  - What skills and attributes learners need to possess to participate effectively in a MOOC?
  - To what degree learners have to be able to self-regulate their learning?
- How do participants plan and reflect upon their goals within the Change 11 MOOC?



# Goals

- Direct attention
  - Increase motivation
  - Increase persistence
  - Assist in formulation of new strategies to learn
- 
- Specificity
  - Scope
  - Difficulty

# Context

- Change 11 MOOC
  - Instructional design, connected learning
  - 6 months
  - Different presenters each week
  - 2,300 registrants
  - Learning professionals (some students)

# Cohort

- Recruited via ‘The Daily’ email sent to all participants in course on Week 17
- 29 interviewees
  - 18f, 11m
- 5 students, 24 professional role (educational developers, learning practitioners, researchers)
  - 12/24 HE, 11/24 K-12, 1W

# Instrument SRL questionnaire

- A measure of SRL within a specific context. Items were tailored to encourage participants to reflect specifically on their learning practices within the Change 11 MOOC
- Motivated Strategies for Learning Questionnaire
  - Pintrich et al, 1991
- Online Self-regulated learning Questionnaire (OSLQ)
  - Barnard-Brak et al, 2010
- Available from <http://db.tt/swdCtQPk>

# Instrument: Semi-structured interview

- Explored various aspects of participation in the Change11 MOOC, including motivation, self-efficacy, goal-setting and planning strategies, as well as patterns of participation and reflection, tool use,
- Available from <http://db.tt/3kDTPohy>

# Goal-setting

...

- Did you set goals for yourself in this MOOC?
- Can you tell me what your goals are?

...

- Collect data, code etc.
- Link to SRL score.

# Types of Goals

- Learning (11/26)
  - (specific, scope (often) beyond course)
- Performance (14/26)
  - (explicitly measurable)
- Participation (20/26)
  - (focused on course components)
- Networking (7/26)
- Did not set goals (3)

# High and Low SRL Profiles

- High SR score segregates with Goal: learning
  - chi-square(1df)= 5.85; significant at  $p=.021$
- High SR score segregates with Goal: performance
  - chi-square (1df)= 9.9; significant at  $p=.002$
- Low SR score segregates with Goal: participation
  - chi-square (1df)= 7.8; significant at  $p=.007$



# Learning Goals

- Yes I did. I wanted to learn about complexity and emergence and how that applied to teaching adults (p5-high).
- Well I guess I did in that I wanted to learn the tools, but they weren't concrete, that's the thing. It seemed like something that I needed to understand or get involved in. (p8-low)

# Performance Goal

- My general goal was to look at the daily newsletter every day, bookmark or sort of ear mark any sort of blog posts that were interesting. Read those within a reasonable amount of time, which I define that as one or two days and then blog about them whenever there's something of interest. I've been able to keep up with the newsletter and I've been able to keep up with blog posts of interest. (p24-high)
- Other than trying to catch all the presentations that were coming up, that's sort of the goal to actually be a regular. Engage with the MOOC regularly, I guess, is the goal. (p21-low)

# Participation Goal

- Yeah I did set goals for myself. ... I wanted to contribute to the online community in some way on an ongoing basis. (p9-high)
- For some of the online lectures, yes. For example the goal was to attend and to be there and things like that. (p15-low)

# Conclusions

- Clear differences in the types of goals set between high and low SRL participants
- Evidence of differences in specificity, scope, difficulty
- Evidence of monitoring – goals being modified

# Reflection: Implications

- Adds to the research evidence on MOOCs
- Provide support for goal-setting within MOOCs
- Applicability to xMOOCs

# Reflection: Limitations

- Context not ideal/Variability of sample
  - Complex motivations (process or content)
  - Previous experience of MOOCs
  - Patterns/levels of engagement
- Small sample size
  - Exploratory qualitative study.
  - Could have targeted specific groups
- Focus on goals limiting

# Reflection: Future Work

- Study a more typical MOOC
- Focus on specific sub-processes
  - and on other phases beyond forethought
- Explore the relationship between SRL behaviours and course design

# Thank you

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*feel free to make contact to discuss in more detail or request slides.*



**Milligan, C., Littlejohn, A., & Margaryan, A. (2013) Patterns of engagement in connectivist MOOCs. *Journal of Online Learning and Teaching* 9 (2) (to appear)**

Connectivist Massive Open Online Courses (cMOOCs) represent an important new pedagogical approach ideally suited to the network age. However, little is known about how the learning experience afforded by cMOOCs is suited to learners with different skills motivations and dispositions. In this study, semi-structured interviews were conducted with 29 participants on the Change11 cMOOC. These accounts were analysed to determine patterns of engagement and factors affecting engagement in the course. Three distinct types of engagement were recognised – Active Participation, Passive Participation, and Lurking. In addition, a number of key factors that mediated engagement were identified, including, confidence, prior experience, and motivation.

This study adds to the overall understanding of learning in connectivist MOOCs and provides additional empirical data to a nascent research field. The findings provide an insight into how the learning experience afforded by cMOOCs suits the diverse range of learners that may co-exist within a connectivist MOOC. These insights can be used by designers of future cMOOCs to tailor the learning experience to suit the diverse range of learners that may choose to learn in this way.

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