# Positioning Paper

**Personal introduction**

I come to the field of researching MOOCs as a practitioner, being a Learning Technologist, and having worked in e-learning since around the turn of the century. Around that time, MIT had just released all their learning assets ‘for free’ on the web as OpenCourseWare. Elsewhere e-learning seemed to be in nascent stages. VLE’s (virtual learning environments) and OERs (open educational resources) were certainly not mainstreamed in any way. I was working at the time in Bristol on a health and social care programme for in-work Radiologists, and came into contact with multiple technologies such as VLE’s, video, 3D animations and interactive ‘learning objects’. I was working largely off-script, not informed by literature, creating online, animated textbooks and VLE quizzes, of the type it seemed that MIT were publishing. Looking back now, the students were learning partly through my learning objects, but also largely through ‘offline’ discussions with their in-work mentors. In this sense, it can be described as ‘blended learning’, albeit not formally conceptualized and scaffolded as such. Retrospectively, I wonder now what impact it may have had on the programme’s sustainability if these discussions could have been captured online too, in terms of widening the number of people who would have been able to participate in the discussions, and the knowledge that could have been created in the online space, and retained for future cohorts. Of course at the time, this type of social-constructivism was limited to a niche of academic practitioners and was maturing itself alongside the technological advances of home computing.

My next job was at Plymouth University and for 3 years was concerned with integrating VLE’s into the faculty and teaching faculty staff how to use these relatively new technologies. My experiences with multimedia at Bristol certainly helped in terms of tutors being able to work to the limits of the technological boundaries, but, reflecting again, these were still rather adjacent to any issues of holistic course design or pedagogy.

My awareness changed at Lancaster University, where I came into contact with social constructivist pedagogy and networked learning, through speaking with the learning technologists who had supported Vivien Hodgson, Peter Goodyear and David McConnell in their networked learning research during the 1990’s. My professional role was still very similar to the job at Plymouth though, helping faculty staff use the VLE’s to support their mostly traditional curricula. After a year I was moved into the IT Services department and to thinking about how these digital technologies, particularly the ‘new Moodle’ can be used on an institutional level. This ‘change’ in 2011/ 2012 moved my focus nearer to elemental course design, as I was continually challenged to mould the tools within the VLE around individual educator’s pedagogical designs whilst also maintaining the singularity of the institutional technological provision.

MOOCs hit the headlines in around 2011 in the US, and gained a lot of worldwide interest and also some outrageous claims about raising people out of poverty. This has waned during 2013 and 2014; MOOC does not nearly trend so high in Google trends for example within UK/ US searches, although worldwide it has remained pretty high and in fact shows increasing rates of participation, although not exponentially like in the ‘early days’[[1]](#footnote-1). Lancaster University partnered with FutureLearn, a MOOC platform wholly owned by the UK OU in late 2013. The first course Lancaster developed was in Corpus Linguistics and it ran in January 2014 and again in September 2014, attracting 10,000 learners each time. Since then we have developed 6 other courses that have either run once, or will repeat during 2015 with enrolments of between 5,000 and 20,000. My role has been fairly all encompassing regarding LU’s MOOCs, ranging from course design, through to course production and also partner liaison regarding future features and toolsets with FutureLearn themselves. I intend to conduct this research project on MOOCs from the point of view of course design, social participation and learning analytics (as in analytics *for* learning).

**Research Positioning**

**Sociological Context**

I have summarized how I became interested in MOOCs as educational experiences; now I would like to look at the concept of lifelong learning to examine where MOOCs potentially fit into the larger sociological and educational narrative.

Peter Alheit (Illeris, 2009, ch. 8) describes the sociological context of modern education and the shifting nature towards the ‘knowledge-based society’, by invoking a term ‘the new educational order’ from John Field (Field, 2000). Field writes of a ‘totally transformed function of knowledge’. The challenges for people within this situation is one of ‘individualisation’ and ‘reflexive modernisation’ (Beck 1992; Giddens, 1991) due to the radical change in the meaning of ‘work’ and by extension where learning and knowledge fits into this new meaning of ‘work’. In brief, the shift to the ‘information economy’ means that ‘work’ no longer means staying in the same occupation for life; it involves alternating phases of work and training - basically requiring lifelong learning to keep up to date. This has clear implications for the traditional education institution, which throughout the 20th century have been concerned with educating mostly young people to degree and higher degree levels, with common ‘stocks’ of knowledge that they can re-use throughout their working lives. This is termed the ‘human capital’ theory, and is largely undermined in the ‘information age’.

*“Knowledge is no longer that ‘cultural capital’ that, according to Bourdieu, determines social structures and guarantees its astonishing persistence through ever-recurring reproduction (Bourdieu, 1984). Knowledge is a kind of ‘grey capital’ (Field, 2000, p. 1) that generates new, virtual economies.” (Alheit, Illeris, 2009)*

In response to this ‘shift’, caused by technological advances, the Internet, and diversity in individual options within the new virtual economy, educational experiences must change from being based around the dissemination of fixed bodies of knowledge, towards a model of continuous exchange between production and management of knowledge. ‘Doing’ knowledge, as in the application of knowledge to an ever-changing environment is the new requirement, and self-managed, reflexive, lifelong learning is the framework through which this process operates.

*“The key educational question is no longer how certain material can be taught as successfully as possible, but which learning environments can best stimulate self-determined learning – in other words, how learning itself can be learned (Simons, 1992; Smith, 1992)” Alheit (Illeris, 2009)*

In summary, knowledge means something new; it has ever-decreasing cycles of utility; self-managed, lifelong learning needs to take over from ‘traditional’ learning programmes and individual learning needs to be social-constructivist. This is because its utility comes from the manner in which it is (reflexively) integrated with individual experience, and an individual’s experience is something that is socially constructed (Vygotsky, 1978). I would argue that within this framework, critical thinking is essential to learning.

I will now consider the personal strategies that should be employed to make sense of the need for lifelong learning. As demonstrated in the quote above, the key question for education is which learning environments best stimulate self-determined learning; the answer must include a large degree of social participation alongside traditional notions of ‘critical thinking’ skills, which order and make sense of new experiences.

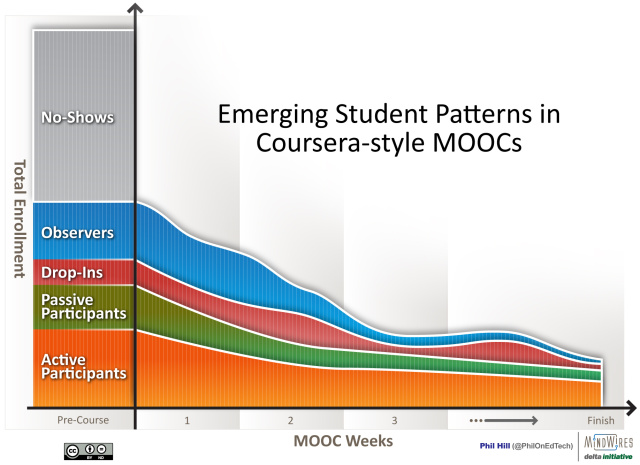
**Philosophy of Social Learning – A Transactional Perspective**

Cooperative learning is one of the success stories of social and educational psychology, and social interdependence theory provides the foundation on which it is built (Johnson, 2009). There are a number of methods of structuring cooperative learning, such as team based and jigsaw learning. Each of these may have value within the context of massive open online education, but this area remains un-researched. What is clear is that the sociological perspective, described above requires a socially constructivist epistemology, in order to create new and useful knowledge.

The social constructivist perspective finds it’s roots in Dewey (1916) who defines the constructivist nature of knowledge construction.

Social Learning – Buckingham-Shum/ Ferguson??? // The power of pull???/ Lave and Wenger?? // Vygotsky (1978) // Dewey (1916) – social mind as a constructivist

To a certain degree, MOOCs seem to fit well into this frame. They attract typically multiple thousands of learners around specific content, they are free to join and allow learners to flexibly manage their own learning. But the flip side to this is that the completion rates are low, and many learners are not ‘active’ or ‘social’, indeed most do not even show after signing up. This graphic from Phil Hill’s 2013 blog post is shows a typical funnel of participation in MOOCs.



Hill, P, 2013, shared under creative commons, no-derivatives

<http://mfeldstein.com/emerging-student-patterns-in-moocs-a-revised-graphical-view/>

This funnel of student patterns of behavior is precisely that – patterns of behavior. In this graphic, Hill describes an active participant as someone who participates in discussion forums and completes most of the quizzes. These are traits that belong to the ‘bodies of knowledge’ dissemination pedagogy, which is positioned as out dated in my summary above. The learners portrayed in this graphic are not measured on their ability to network and create new knowledge, but on their ability to reproduce or consume existing knowledge, generally through the viewing of videos and the completion of multiple-choice questions.

Before we write MOOCs off as being unfit for the type of learning that is required in the knowledge economy, we need to consider what definition of learning is fit for this context and consider if MOOCs have the ability to deliver:

* Attraction spaces
* Potential for massive participation/ social networking

Deep learning/ critical thinking/ sense making in MOOCs – how to measure this?

Where do MOOCs fit into educational practice within this frame?

Self-directed learning;

What does learning in MOOCs mean and how is this measured?

Garrison (1991);

I want my project to be ‘grounded’ in previous computer mediated learning work, and with a clear sense of what I mean by learning. I believe the definition of learning requires a particular focus within the MOOC context where learners’ extrinsic motivations are diverse and assessment of learning is typically achieved automatically due to the large numbers of participants. I am interested in whether MOOCs can promote deep learning and critical thinking at scale and how this can be measured.

Garrison (1991, 1999) sets out an instructional design model of ‘communities of inquiry’ that requires 3 separate ‘presences’ within any educational experience: cognitive presence, social presence and teaching presence. This builds on the practical conception of learning from Dewey (1916), who proposes that cognitive experience is a collaborative reconstruction of experience. I aim to relate communities of inquiry pedagogy to my 3 areas of research interest for the MOOC context (above): course design (teaching presence), social participation (social presence) and learning analytics (mediators of cognitive presence). By looking at MOOCs from this perspective, I wish to measure learning not by logging individual participation-to-completion of a course, or the aggregated reverse of this, general rates of attrition within a course, but by the levels of critical thinking that are fostered within the overall community of inquiry and the extent to which the course design and digital tools facilitate this critical inquiry.

What are the research challenges for MOOCs? (Fischer, 2014)

Why Communities of Inquiry?

The 7C’s of course design – Uni of Leicester - <http://www2.le.ac.uk/projects/oer/oers/beyond-distance-research-alliance/7Cs-toolkit>

What has been written about MOOCs already? (Gillani, 2013, 2014; Kizilcec, 2013; Anderson, 2014; Clow, 2013)

Why I have chosen communities of inquiry as a pedagogical frame through which to examine MOOCs?

Community of Inquiry (Garrison, 1999) – learning as critical thinking

Lipman (1991) – Community is valuable if not necessary for educational experience if critical thinking and deep learning is an outcome.

Dewey (1959) – education is a collaborative reconstruction of experience

Knowledge Construction (Gunawardena, 1997) – Measuring the cognitive presence in the CMC

Social Presence (Gunawardena, 1995; Garrison, 1997) – Cognitive presence is more easily sustained when a significant degree of social presence has been established

1. <http://blogs.edweek.org/edweek/edtechresearcher/2015/04/three_insights_from_the_harvardx_and_mitx_year_two_reports.html> [↑](#footnote-ref-1)