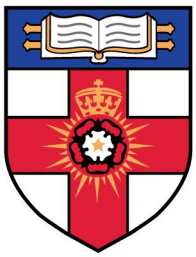
Exploring factors that influence the impact of MOOC learning on participants' professional practice



UNIVERSITY OF LONDON

CENTRE FOR DISTANCE EDUCATION
Research and innovation in flexible and distance teaching and learning

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Project Aim and Objectives:

The aim of this project was to explore factors that might predict the impact which the Massive Open Online Course (MOOC) experience has on participants' professional practice. It explored data from the ULIP MOOC, *Teaching EFL/ESL Reading: A Task-based Approach,* developed and taught by the research team.

The project objectives were to:

- Explore how student experience and achievement interact to create a situation where students are able to apply their learning to their professional practices;
- Investigate how the relationship between participants' background and their perceptions about the usefulness of the activities relate to the extent to which they applied knowledge and implemented activities from the MOOC in their own practice;
- Investigate the extent to which Continued Professional Development in the form of a task based MOOC influenced the subsequent classroom practice of language teaching professionals; and
- Develop learning resources and research outputs for distance learning educators and researchers in HE, including global institution providers.

Introduction: Continued Professional Development (CPD) in the MOOC research landscape

Across sectors, there is growing interest in developing MOOCs for professional learning (Milligan & Littlejohn, 2014; 2017). Within the field of education, CPD is a dominant area of MOOC design and development; however, evaluating the impact of MOOC learning on professional practice remains a complex and contested issue. For example, MOOC participants have varying perceptions of what constitutes learner 'success' and 'completion', which often range in scope from the usefulness or relevance of course contents to finishing all or most of the structured activities (Loizzo, 2015). Some studies have shown that participants may benefit considerably from viewing and/or attending only select parts of a MOOC to satisfy their specific learning goals (Bonafini, 2017; Bonafini, et al., 2017; Kahan et al., 2017; Glass, 2016). In addition, while thousands of participants may enroll on a course, there are low completion rates overall and only a minority attend a MOOC from beginning to end (de Barba, Kennedy & Ainley, 2016; Gil-Jaurena, Callejo-Gallego & Agudo, 2017). It follows that questions around student persistence and achievement prevail in the MOOC research landscape. Various strands of MOOC research have aimed to address this concern. Most notably, empirical enquiry has focused on design and pedagogical categorisations of MOOCs, resulting in the current differentiation between connectivist and socially-driven MOOCs, where the learning is mostly through discussion (cMOOC); more instructivist and institutionally-driven MOOCs, where input is paramount (xMOOC); and their combination in a 'hybrid MOOC' design, which combines the features of direct tutor-led instruction with peer discussion (Bayne & Ross, 2014; de Barba et al., 2016; Jones et al., 2016; Vivian, 2014). Despite issues surrounding retention, the increasing number of Higher Education

institutions involved in developing MOOCs has generated debates about 'how' and 'to what extent' professional learning in MOOCs can be officially recognised, such as accreditation of prior learning or receiving course credits (Yuan & Powell, 2013; Sandeen, 2013; Annabi & Wilkins, 2016).

More recently, there has been growing interest to expand beyond MOOC classification studies to more nuanced examination of complex student participation and interaction patterns. One way has been to mine massive data sets available on MOOC platforms to inform future technical and pedagogical design (Pursel et al., 2016). Other studies have pointed to the need for more qualitative methods to better account for student perspectives and experiences on MOOCs (Veletsianos & Shepherdson, 2016; Petronzi & Hadi, 2016). For this study, we constructed a survey with questions which arose from the specific structure and activities of our MOOC. We then complemented the survey with ten interviews with participants on the course, as well as with some of the general analytics provided by *Coursera.*

MOOC Context: The underlying principles guiding our CPD course design

Our MOOC provides an introduction to task-based language teaching (TBLT), and explores how this approach can be applied to the teaching of second language (L2) reading. While TBLT is an area of second language pedagogy that currently attracts worldwide interest, so far very few materials are available that guide L2 educators in applying TBLT theory and practice to L2 reading instruction. Although the areas of TBLT and L2 reading are well explored academically, they are not often linked together. The course bridges this gap by discussing how reading can be conceptualised as a communicative act and is taught utilizing task-based principles. Task-based teaching also provided the framework for the pedagogy we employed in our MOOC.

Research Methodology and Methods:

We conducted a mixed-method study, including a survey disseminated to all learners on the MOOC (including quantitative and qualitative questions), ten semi-structured interviews with learners (five completers and five non-completers), and analytics obtained through the course platform. The survey focused on the following areas: participants' background variables, the perceived benefits of different MOOC activities, and the extent to which participants applied knowledge from the MOOC or implemented activities from the MOOC in their practice. The interviews were conducted to gain a deeper understanding of the relationships among these three areas. The survey and interview data were also triangulated with selected course analytics.

Research Timeframe:

March 2018 – January 2019

Research Scope: The innovative aspect of the project

Few studies to date have looked at the long-term impact of MOOC learning on participant practice. Through our survey and the interviews, we asked participants to reflect on the actual impact the MOOC has had on their classroom teaching. We were also able to highlight which participant background variables were key predictors of application of learning to professional practice; which MOOC activities (e.g., tutor video lectures, discussion forums, readings) were perceived to influence participants' continued professional development; and also the ways in which participants on our MOOC applied their learning to their teaching practices.

Key Findings and Implications: The major achievement of the project

As evidenced by findings, our study has direct implications for future research, design and development of MOOCs, particularly courses aimed at professional practice. We highlight the main findings below.

Participant background variables

- There is indication that participants with more language teaching experience are more likely to benefit than other participants on the MOOC. In particular, they are more likely to find the readings useful and more likely to use insights gained from other MOOC activities and assignments.

Reasons for taking the MOOC

- We found that participants had very clearly articulated reasons for taking the MOOC, informed by specific professional purposes.
- The specificity of our topic and the focus on Task-based Language Teaching (TBLT) are two primary reasons participants identified for taking our MOOC.

The perceived benefits of MOOC activities to professional practice

- Video-lectures and readings made a significant difference to participant learning on the course and application of their MOOC learning into their own professional practice.
- Peer-graded assignments and the opportunity to provide peer-feedback made a significant difference to participant learning on the course and application of their MOOC learning into their own professional practice.

Conceptualising MOOC activities within a Task-based Teaching approach

- The two main findings above led us to conceptualise the five MOOC activity types we had designed (videos, readings, discussion forums, giving/receiving feedback, other assignments) as falling into two main categories: input-based activities (videos, readings) and output-based activities (discussion forums; preparing peer-graded assignments; giving feedback on assignments). Continuing this line of thinking, some of the output-based activities (i.e., peer-graded assessments) in our MOOC can be viewed as task-based activities in a task-based approach to teaching and learning. This then suggests that the input-based activities (i.e., videos and readings) function as pre-task activities in a task-based approach to teaching and learning. Overall, then, participants benefited from a task-based approach to teaching and learning in the MOOC itself.
- This leads us to suggest that, besides categorising MOOCS as xMOOC, cMOOC or hybrid MOOCs, the task-based approach is helpful for conceptualising a pedagogical construct for online CPD.
- Participant comments on the way they were able to apply the activities they wrote for assessment on the MOOC to their actual classrooms mirrored the focus in TBLT approaches on a 'real life' outcome. These comments thus provides evidence of our success in implementing a task-based approach in the design of the MOOC.

It is a major achievement of our research to be able to identify the ways in which task-based principles can be used to define, guide and design online CPD activities. Although some MOOCs (see for example *Task-based Language Teaching with Digital Tools; First Steps in Learning and Teaching; DS 106 Digital Storytelling; Games MOOC; OT12: An Open Translation MOOC*) and related literature (Anders, 2015; Beaven et al., 2014; Hopkins, 2015; Murray 2013; Pili & Admiraal, 2016) refer to the use of tasks or a task-based approach, they do not provide the same level of specificity we offer or can provide evidence of direct impact on professional practice. In particular, our task-based pedagogical construct is drawn from the intersection of TBLT theory and second language reading. We consider our combined framework especially generative for future design and development of online CPD aimed at attracting global audiences. In light of this, our research demonstrates a distinctive approach to shaping pedagogical tasks in ways that can impact on the practice of professionals with different backgrounds, experiences and future aspirations.

Future Dissemination Activities:

A journal article is under preparation and will be made available in the coming months. Below are upcoming conference presentations.

- Domingo, M., Révész, R., Paran, A., & Palange, A. (15 March 2019). *Exploring the impact of learning on participants' professional practice in a task-based online CPD course*
- Presentation at the RIDE Conference, *Addressing the challenges of digital education: Professional development and student experience.* London, UK.

- Domingo, M., Révész, R., & Paran, A. (12 March 2019). Exploring factors that influence the impact of MOOC learning on participants' professional practice. Paper to be presented at the *American Association for Applied Linguistics* Annual Conference. Atlanta, USA.
- Paran, A. (4 April 2019). CPD through MOOCs: What teachers implement in their classrooms. Paper to be presented at the *International Association for Teachers of English as a Foreign Language* Annual Conference. Liverpool, UK.

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