Name: Doireann Wallace

Course: M.Sc. in Technology and Learning

Title: How do instructor cues influence comment characteristics in an anchored environment xMOOC? A case study of the TCD *Irish Lives in War and Revolution* MOOC

Supervisor: Dr Silvia Gallagher

Year: 2016

Abstract

Providing discussion forums and comment platforms for learners to engage with course material and interact with one another is established practice in online learning, but MOOCs (massive open online courses) present new challenges due to the scale of enrolment and the consequent lower level of instructor involvement with learners. Research on pedagogical practice in MOOCs is still in its early days and to date relatively few empirical studies have been carried out on the role commenting activity plays within this learning environment or on the factors affecting commenting behaviour. Research into how the design of questions and instructor cues (understood as any prompts to encourage commenting) influence comment characteristics can productively inform pedagogically sound learning design for MOOCs. This research explores how instructor cues influence comment characteristics in an anchored environment xMOOC through a case study examining cue-comment relations in the *Irish Lives in War and Revolution* MOOC, developed by Trinity College, the University of Dublin, and delivered through UK-based MOOC platform FutureLearn. The research is guided by a theoretical framework in which the cue-comment relation is seen as an 'adjacency pair' , where the communicative expectations of the cue should meet with an appropriate response in the comments. To develop an appropriate classification of instructor cues , a first phase of analysis uses a combination of open and directed coding (applying Anderson and Krathwohl's (2001) revision of Bloom's taxonomy of cognitive domain learning objectives) to analyse a sample of cues. The results of the cue analysis highlight the importance of the affective domain (Krathwohl et al., 1964), previously unexplored in the context of instructional questioning, to instructor cue design. A framework combining the revised affective and cognitive domain taxonomies is developed. A second phase of analysis applies directed coding using the combined framework to a sample of learner comments for each cue type, to explore the extent to which comments respond to the communicative expectations of the cues. Results suggest that cue affective or cognitive disposition does influence comment affective or cognitive disposition, although with varying degrees of strength. The research contributes a novel understanding of the importance of the affective domain in MOOC cue design and makes a practical contribution in the form of a visual framework, informed by the analysis, to assist

MOOC designers create instructor cues appropriate to both affective and cognitive learning objectives.