

Learning in a Massive Open Online Course: Examining Differences between English and Arabic Participants (Poster)

Abeer Watted

Technion – Israel Institute of Technology

abeerw@tx.technion.ac.il

Miri Barak

Technion – Israel Institute of Technology

bmiriam@technion.ac.il

Abstract

This study describes a massive open online course (MOOC) that was delivered at the same time in two languages: English and Arabic, providing innovative contents in nanotechnology and nanosensors to a wide range of population. Guided by the sociocultural theory, this study was set to compare between the learning outcomes of the English and Arabic participant, in terms of: cultural diversity, engagement in the course, and knowledge construction. The null hypothesis was that no significant difference exists between the two groups. The exploratory case-study design was employed, collecting data via pre- and post- knowledge questionnaires and access logs.

Findings indicated differences in cultural diversity between the two groups in terms of nationality distribution. The English MOOC was more heterogeneous than the Arabic MOOC. While in the English MOOC, the top five countries (after the US) were: India, United Kingdom, Spain, Brazil, and Canada; the Arabic MOOC included participants from: Egypt, Israel, Germany, Kuwait, and Spain. This may suggest that participants' native language (and not country of living) is a major factor in choosing a MOOC.

The examination of the learners' engagement in the two MOOCs indicated similar engagement pattern but different involvement levels; most participants, over 70% in the English course and 62% in the Arabic course, were "passive students". They viewed the video lectures and read forum posts, but were not actively engaged in the learning process. The difference between the English and the Arabic MOOCs in their participation curves can be explained by the fact that our course was the first MOOC presented in the Arabic language and therefore many Arabic speaking students enrolled to the course just to see what it is all about. Many of those who enrolled in order to complete the course lacked the experience of learning from distance. They participated in the first few weeks (watched the lecture videos, answered the quizzes and submitted assignments), but as the learning materials became more complex, high dropout rates were identified.

A similar trend was indicated with regards to learners' achievement in the post-test. Data showed that the English MOOC learners received higher mean scores compared to their peers in the Arabic MOOC. This gap suggests that learners' lack of proficiency in learning from distance had a great influence on their learning achievements, especially when complicated questions were presented. We found that the differences between the two groups increased as the level of content complexity increased.

Keywords: Cultural diversity; Higher education; Massive open online course; Sociocultural theory.