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# THE ROLE OF MOOC IN UNIVERSITY'S LEADERSHIP STRATEGY

The paper presents the situation of transformation in higher education, which driven by the rising interest in Massive Open Online Courses (MOOCs). MOOCs seen as transformation drivers in all levels of education and are very important to lead in education sector. However, this transformation comes with the new challenges for higher education. Higher education institutions must revise current and offer new ways of course design and delivery as well as to adapt a learning process according to the new challenges. The Lithuanian case presented in this paper.

Keywords: OERs, MOOCs, pedagogical approach, methodological approach, higher education, challenges.

#### Introduction

The aim of the papers is to present the technological and methodological approach of the MOOCs suggested by leading universities of the world and to present the Lithuanian case with the research results on MOOC design and delivery.

The objectives of the research are to present the pedagogical and technological challenges for MOOCs design and to present the research data collected during the first national MOOCs delivery process in Lithuania.

Kaunas University of Technology joined OpenupEd initiative of EADTU with MOOC on Management in Eng-lish language in 2013. Over 1500 interested students were registered and during the period of this MOOC delivery, about 600 of them actually took part in course activities but only 83 received a graduate certificate. We have developed a special portal (http://open.ktu.lt) based on Moodle principles as our main platform for the university offered MOOCs. In 2014 it was designed and delivered the national course on «Information technologies» with totally 2009 participants. The data analysis on the participants input presented in the paper bellow.

#### The influence of Open educational Resources in MOOCs delivery

Open educational resources (OERs) and massive open online courses (MOOCs) indicated as an impulse for transformation in any level education system and suggested by the universities leaders in all over the world.

Open Educational Resources is defined as any educational resources available at no or a little cost. The term includes any kind of educational resource such as textbooks, course readings, games, simulations and any other virtual material used for teaching and learning. The initiator of OERs was MIT university, which opened course material to wide society in early 2002 (1). However, UNESCO used the term «Open Educational Resource» in 2002. Nowadays, OERs recognized by core 5R activities (see figure 1). These 5R permissions, together with a clear statement that they provided free and in perpetuity and articulated in many of the Creative Commons licenses (2).

#### The 5R Permissions of OER



Figure 1. 5R permissions of OER

A big challenge to MOOCs is a delivery for the wide society assuring massiveness and the keeping quality in education. Yuan and Powel (3) describe MOOC as a massive open online course (MOOC) purposed for unlimited number of participants and open access via the Internet. MOOCs provide various kind of content: course material, readings, problem sets and place for communication such as interactive user forums for communication maintain in community of students, professors or teaching assistants (4).

The open sharing of educational material, technologies and tools, methods and experiences creates new opportunities for innovation. Universities must offer courses, which satisfy the needs of business and public sectors and changes in students learning habits (5). Open and online education changes the education system, study programs and courses (6). Open education initiate international cooperation between educational institutions (7) (8). This openness become one of the main reasons for delivering open courses or services (8). Open education also does change the relation universities (9) (10) and service providers as well as companies for training offers (11) and investors, governments and foundations. Research methodology

MOOCs have been popular for quite some time now (15). Many people from other countries use this model for learning (15). This convenient and completely free learning model helps to easier gain knowledge and learn via the Internet (15). The course in Lithuania in national language organized for the first time in 2014. For this reason, the survey reveals the opinion of learners about this type of learning courses to see what could be improved or changed.

In total, 2009 participants took part in the course from which 300 learners successfully completed the course and awarded with certificates. The analysis of the questionnaire shows 26–60 year old respondents (92% in total). The youngest group included 1% of all respondents who were younger than 18 years. 18–25 age group included 4% of all respondents. The oldest group included 61 year olds and older ones, which constituted 3% of all respondents. Such dissemination shows a huge interest of youngsters and middle-aged people in information technologies. It only confirms that this group is interested in new technologies, although the lack of theoretical and practical knowledge identified.

The majority of the respondents has a higher education degree (90%). 2% of all respondents respectively proved having advanced vocational education and training, post-secondary education, secondary education or not finished secondary education. Such statistic measures lead to the conclusion that people that are more educated tend to gain more knowledge in different areas.

The majority of the respondents in MOOCs are schoolteachers. The answers of the respondents show that the majority of the respondents is teachers. In total, 46% of the respondents chose this answer and 15% of these respondents are representatives of other educational institutions. Totally, 10% indicated they represent administrative staff and 8% are higher education representatives from the pedagogy area. 6% of respondents are representatives of different professions: «psychologist», «not working», «on maternity leave», «school speech therapist», «study mentor», «student and specialist», «supervisor of the education development centre», «security guard», «pensioner», «state officer», «specialist». Totally, 5% indicated they belong to a group of civil servants and 4% stated they are students. Workers, unemployed and school students constitute 2% of all respondents. Such distribution leads to the conclusion that the course of «Information technologies» is relevant to participants who work in educational institutions.

The majority of MOOCs respondents are from Lithuania. To find out the residence of respondents, an additional question about the exact place of residence was included into the survey. The data analysis shows that the majority of respondents (97%) are from Lithuania. Only 3% indicated other place of residence: Cyprus, Ireland, UK (Lithuanian migrants). It is obvious that the Lithuanian respondents have a possibility to get more information about MOOCs.

## Results and Discussions

Evaluating motivation models, which used to encourage learners to take a part into the course, a possibility to learn at any place and time, has motivated a lot. A possibility to receive a high-quality free course material and course material directly related with IT have been evaluated very similarly and can be considered as huge advantages in taking a part into MOOCs (see fig. 2). A possibility to discuss and share experience in e-environment and widely published course as motivation models do not work effectively.

MOOCs develop competences related with e-learning and learning process management. The results of the research analysis on competences gained during the learning process in the massive open online course showed that most of learners designed self-learning, learning in a virtual environment and openness to new experience competences, which help them to make the learning process more effective (see fig. 3). The learners developed application skills of Information technology in practice and learning process management. Less than expected, the skills of theoretical perception of Information Technologies and communication and collaboration skills with different people were developed. The least developed skill is constructive opinion sharing in discussion which might relates with poor learner's engagement on forums.

According to the results of the research, the MOOCs as a learning method evaluated as very effective and useful for learners. MOOCs was even more useful than e-learning environment method without external training hours or mixed learning (see fig. 4). It was even more effective than traditional learning method. This interest to MOOCs can be a reason why more and more Higher Education Institutions choose to deliver MOOCs.



Figure 2. Motivation models which helped to choose MOOCs "Information Technologies"



Figure 3. The designing competences in MOOCs



Figure 4. Evaluation of the learning methods

#### Conclusions

The practical application and delivery results of course «Information technologies» presented in the paper. The research data show that practical exercises on the course «Information Technologies» have led to the following conclusions. Concept and features of the massive open online course (MOOC) are not easily perceptible to learners. The results show learner's impact in a virtual learning and learning management also openness to new experience. The main disadvantages of participation at MOOCs include the absence of direct communication with a lecturer (teacher) and lack of real time communication and collaboration.

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## FACTORS AFFECTING THE EMPLOYABILITY OF INTERNATIONAL GRADUATES

This paper is aimed to identify the factors affecting the employability of international graduates based on the review of relevant international literature. The study groups a wide range of factors associated with employability into four categories, namely higher education institutional factors, (graduate) individual factors, employers' perspectives, and contextual factors. Based on the analysis, implications for higher education institutions are developed in terms of enhancing their international students' employability along with suggestions for future research in this underexplored field.

Keywords: international education, graduate employability

#### 1. Introduction

Nowadays, the employability of graduates is often used as a performance indicator to measure the quality of higher education (HE) by national governments and international rankings (Teichler, 2009). The potential students are also beginning to pay more attention to the employment prospects when selecting a place to study. Given the increasingly spreading practice to charge tuition fees for higher education, the global competition for international students is becoming more rigorous. The problem of ageing population and the resulting shortage of skilled labour in many countries (Gordon, 2009; Manpower Group, 2012) adds to the fact that the international graduates' employment is becoming a concern in terms of both attracting potential (fee-paying) international students and supporting the national economic competitiveness. Thus, having full understanding of factors affecting the employability of international graduates is crucial for policy makers and higher education administrators willing to develop strategies for attracting and retaining foreign talent. ate employability agenda, the existing studies mainly look at issues from narrow perspectives often failing to explain the employment outcomes for graduates from different demographic groups (Holmes, 2008). In particular, the international graduates have not been given due attention yet in the research of HE-to-work transition (Mosneaga&Winther, 2012; Huang, 2013). Therefore, there is a need to synthesize the literature for developing a comprehensive understanding, and therefore, this paper tries to answer the following research questions: «What are the factors affecting the employability of international graduates?»; and «What recommendations can be elicited for higher education institutions based on the review of these factors?»

In spite of a big volume of literature dealing with the gradu-

#### 2. Methodology

The main approach employed in the study is through a review of international literature on the topic. The summary of the major studies reviewed in this article is given below.