

# Survey of Awareness of Massive Open Online Courses (MOOC) – a Case of International Black Sea University Students, Georgia

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## Abstract

This article examines the awareness and application of distance education among the students at the International Black Sea University (IBSU, Georgia). It suggests the way of risk-free exploration of the Massive Online Courses within the university curricula or outside of the institutional program. We employed the quantitative method to gather the data from IBSU bachelor students; the data was analyzed by SPSS 17.0 software. The findings suggest that technology must be used more efficiently for educational purposes, and instructors should help students to improve their computer skills. Digital literacy will promote lifelong learning and motivate students' self-development.

**Keywords:** Distance Education, Massive Online Course, Open Source Platform, MOOC, Technology, Online, IBSU

## Introduction

The demand for highly-specialized professionals is constantly growing; so the range of educational means is expanding. Over the years, the access to internet made it possible to explore numerous resources and share experiences at great distances. Although distance learning is not something new, not all students and educators are enough informed about the opportunities it offers. The quantity of online courses is rapidly growing, and so does the quality. The emergence of various new educational platforms has taken education to a new level of development. Students' motivation and desire is the only requisite to be enrolled to the online course and be instructed by experts.

Massive Open Online Course, or MOOC, is a response to the students who are challenged financially. As the tuition fees for education are rising rapidly, those who cannot afford them have an alternative way to enrich their experience. The main characteristics of MOOCs are: quality, flexibility, high level of interaction and, what is especially valuable that these courses are free of charge. If you own a computer with the internet access, you are fully equipped for starting your education.

MOOCs were initiated in Canada by Stephen Downes and George Siemens, but gained popularity in the U.S. when Stanford University professor Sebastian Thrun held a free online course on artificial intelligence in 2011 (Nana-Sinkam, 2014). Some years later, MOOCs expanded its audience to tens of thousands users enrolling in courses in science and humanities. MOOCs began to grab the attention of the policy makers, which resulted in the number of contracts with the leading American universities. According to Helen Hu

(2013), Coursera, Udacity and edX are the three primary ventures pointing the way to a new era of learning.

The structure of a typical MOOC is suitable for each individual user, though the course is targeted at the mass audience. A five to seven minute video is followed by interactive quizzes. A student has an opportunity to pause or rewind the video and watch it on his/her own pace. Students submit home tasks, which are automatically graded. But the most important is the feedback, which is provided both by the instructor and the peers. The major MOOC providers, Coursera, edX, and Udacity, have offered a range of approaches with one central problem—massive student numbers are impossible for teachers to handle. To deal with the problem, MOOCs commonly offer a simple solution — get the students to teach and grade each other (Baggaley, 2014). Peer-review motivates and supports students, giving the chance to share knowledge and ideas with the ones you might have never had chance to meet in-person. More than that, the MOOCs in science create virtual laboratories to engage students into the learning process through game. Massive open online courses (MOOCs) represent a potentially exciting opportunity to use technology to realise many of the long-promised benefits of universal higher education. (Marshall, 2014)

Some critics consider MOOCs to be suitable only to high-achieving students. McGuire (2012), for instance, considers that students first need to learn how to learn and get acquainted with the basic skills. The director of the academic advising center Ned Muhovich supports the idea to offer MOOCs to the best students, in fact, he advises a hybrid

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of standard classroom and online instruction, but never to the ones who struggle academically (Hu, 2013). The opponents stress the lack of face-to-face tutoring as one of the main weaknesses of online courses, though it is hard to speak about tutor-student attention in the standard classes of 80-120 people. More than that, a typical MOOC motivates students to interact through frequent in-video quizzes. The online format allows professors to pack more material into a 10-minute lecture segment knowing that students will have the option of re-watching videos multiple times (Koller et al, 2013).

Colleges have found several useful and promising niches for MOOCs. Foundations like the Bill and Melinda Gates and Hewlett Packard have helped colleges to create MOOCs to offer students a free or inexpensive way to master the remedial coursework they need to enroll in college. Higher education institutions like the College of Southern New Hampshire are experimenting with offering college credit to students who have taken MOOCs after they have passed the appropriate prior learning assessment exams (Lokken & Mullins, 2014).

The intention of Massive Open Online Courses varies from financial considerations to personification of education for modern students. The rising rates of student attrition in standard classes proves the viability of alternative schooling. In fact, online education is a unique learning experience. The students have the opportunity to control the pace of instruction, and take control of how they study the course. Learning autonomy puts individualism under the stress and motivated them into creativity. According to the theory of connectivism by Downes and Siemens, education should be transformed from the traditional, highly-structured teacher-centered courses to open networks of autonomous learners (Siemens, 2005). Due to the massive growth in online networking, the use of online and other 2.0 technologies is becoming common. Increasingly some learners choose not to use the learning environment provided by a course or institution, but to meet instead in locations of their choice, such as Facebook, Twitter, wikis or blogs (Mackness et al., 2010).

The American Council on Education (ACE) has a long-standing course review and credit recommendation service, which normally applies to formal learning that does not take place on a university campus. ACE is completing a pilot project to adapt its existing service to MOOCs and recently approved five MOOC courses for credit recommendations. Cathy Sandeen described the association's recent efforts to formally recognize student achievement in MOOCs (Diaz, Brown, & Pelletier, 2013). Accredited online course would contribute to pursuing the jobs.

## Survey background

According to Georgian Law on Higher Education ( article 21'), "E-learning – study process or a part thereof, based on modern information and communication technologies and organised by a higher education institution for persons staying on the territory of Georgia for obtaining qualification, which process does not provide for simultaneous presence of students and a teacher at a specific place. In is mandatory to employ the respective approaches and methods of curric-

ulum planning, organisation and administration of the study process for the implementation of e-learning". Thus, the law limits the rights of foreign students who would like to do at least part of education from their home countries. E-learning diplomas obtained abroad are not recognized, so students may take MOOCs for their professional development, but not for its official recognition. According to article 474.4 "A person can enroll for an electronic teaching programme only at the first and second cycles of academic higher education, commensurate with the procedure." Limiting e-learning to Bachelor and Master Studies also does not look very logical, as the higher the level of education, the more independent studies can / should be done by the person". But, as our research will show, even these opportunities are not often used by our students.

This paper analyzes the quantitative data received through a questionnaire filled in by the International Black Sea University Bachelor students. The International Black Sea University is a private educational institution located in Georgia, Tbilisi with English as the tuition language in the majority of programs. All three cycles of higher education are offered by the university's 4 faculties: the Faculty of Business Administration, The University focuses on engineering technology, information technology, education and humanities, business, law and international relations. Students take from five to seven courses per semester, with 75 ECTS limit per year. At the time of the survey, IBSU had approximately 2000 students enrolled in the bachelor programs.

One of the major goals of this paper is to contribute to the understanding of multiple factors that influence the usage of MOOCs. Understanding the pattern and motivation is an important key for planning the future goals, and if the findings are satisfactory, we would like to promote the recourse for students' use. A second goal is to examine the statistical relation between the usage of MOOC and individual characteristics of students - gender, year of study and English proficiency level. The results reveal that MOOC application is related to multiple factors which extend beyond it.

## Method

A questionnaire for the survey was created in the Google form and introduced to the students through personal emails, social media (private Facebook groups) and QR code posters. The questionnaire consisted of 11 close-ended questions, focusing on students' gender, study year, English proficiency level, familiarization with online content courses, and internet accessibility. The results were converted to the excel form and imported to SPSS, the final data were analyzed with SPSS Statistical Package. The charts and graphs were created and the data results discussed and analyzed. Some suggestions are made for the further research. The survey was distributed to the students of the faculties of Computer Engineering and Education and Humanities; 67 students volunteered to participate in the survey.

## Discussion

According to SPSS results, the following data results were analyzed. Figure 1 shows that 53.73% percent of students were female, and 46.27% percent of them were male.

Figure 2 indicates that 17 freshmen, 14 sophomore, 26 junior and 10 senior students participated in the survey.

According to Figure 3, 88.06% of students have smart phones and only 11.94% percent of students do not use their phone to use internet.

Figure 4 shows that 98.5% of IBSU bachelors students have an access to internet at home from desktop, laptop or tablet, 1.5% of students do not have access to any computer device at home. It shows that the majority of students do not have any difficulty to access technology and laptop is popular due to its portability and mobility. Tablet usage is still not so popular and widespread in Georgia.

In Figure 5 we see that 65.67% of students have fast broadband connection at home, 29.85% of them only uses mobile internet and only 4.48% of them cannot use internet at home. Taking into consideration that in IBSU library and computer laboratories internet is available 6 days a week during work hours and twice a week in the evening, it is clear that all IBSU students have an access to the internet, which shows the good potential of using internet for educational purposes. IBSU has digitally-literate students.

90% of students (Figure 6) have internet access from their houses. MOOCs promote time flexibility, so the majority of students can be enrolled in the course with no need to be tied to strict school hours.

Figures 4 and 6 show that the students are fully equipped to be enrolled in the course. According to proficiency levels of their English (Figure 7), they are all - except 1.5% - above the intermediate level and they have no problems understanding spoken and written English. It is a great opportunity for them to take online courses since most of the delivered courses are in English.

According to the results, students are insufficiently informed about them. When we asked the students if they

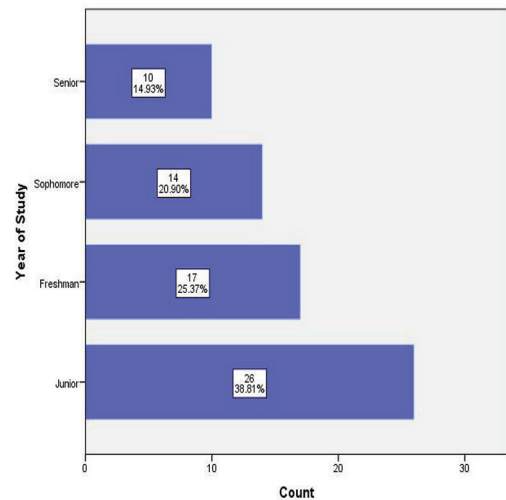


Figure 2. Year of study distribution of students

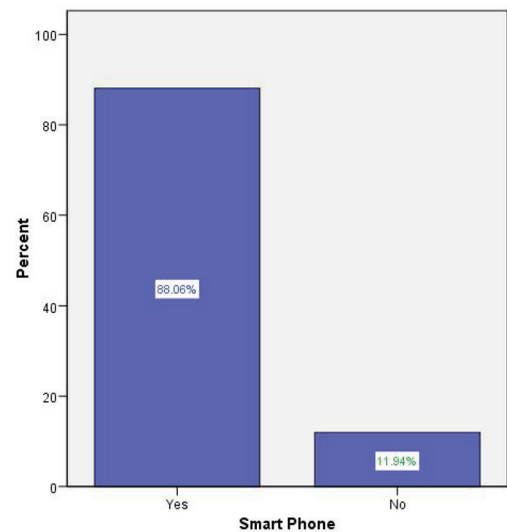


Figure 3. Possession of Smart phones

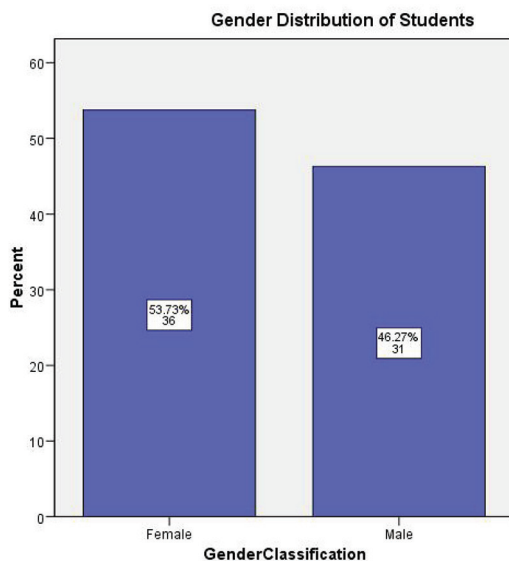


Figure 1. Gender distribution of students

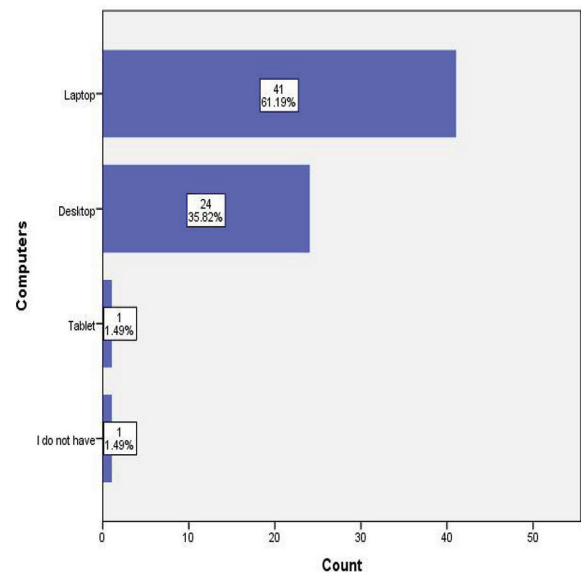


Figure 4. Possession of other gadgets

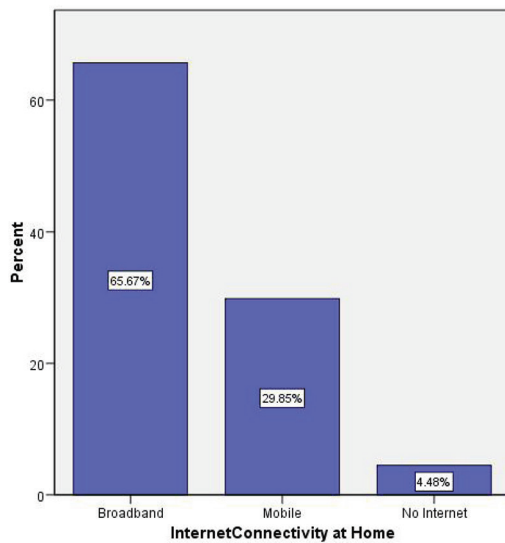


Figure 5. Internet access.

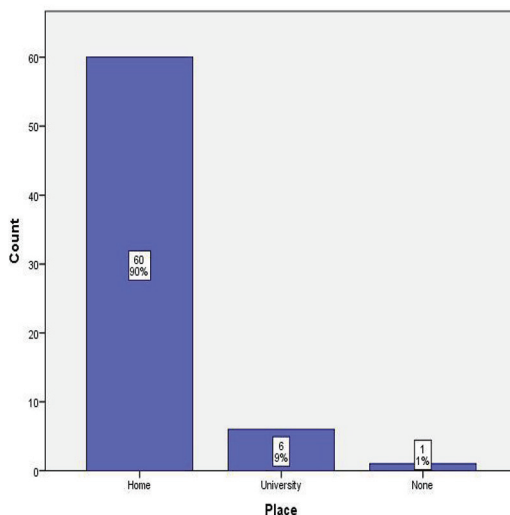


Figure 6. Internet access location.

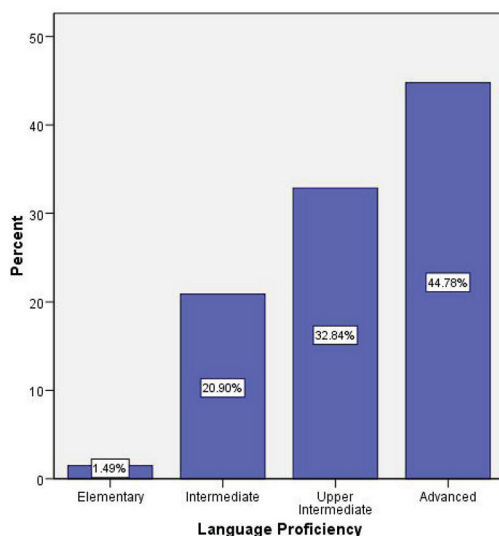


Figure 7. Language proficiency level

have ever attended a MOOC, 61% of them mentioned they have never heard about it or never took a course. 6% of students took 10 or more courses, 10% of them took between three to five courses, 4% took six to nine but the majority of them (18%) took 2 or less MOOC (Figure 8). It proves the necessity to promote online courses.

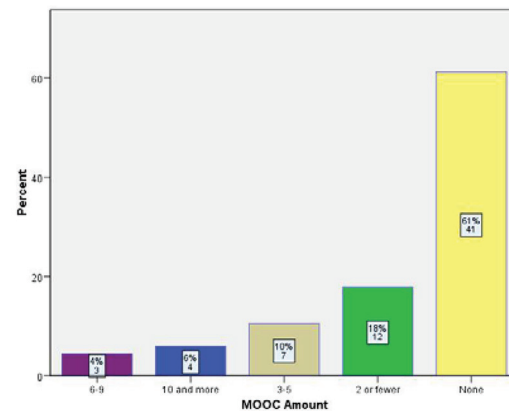


Figure 8. The number of MOOCs taken

According to Figure 9, among the students who enrolled in a MOOC, 43% spent three hours per week, 23% spend more than five hours, 11% spent 5 hours and 8% spent only one hour for online content. There is an assumption that some students have heard about the MOOCs but never participated in any; the reasons must be questioned in the broader research.

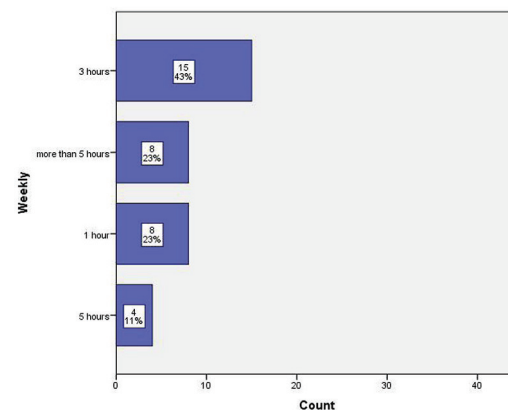


Figure 9. Distribution of study time

The last figure (Figure 10) claims that, although there are many MOOC providers on the web, IBSU students only enrolled in two of the most famous ones - the Coursera founded by computer science professors Andrew Ng and Daphne Koller and edX which differs from Coursera and Udacity since it is a non-profit and open source platform, founded by the Massachusetts Institute of Technology and Harvard University. None of the students have taken classes from Udacity and other MOOC providers.

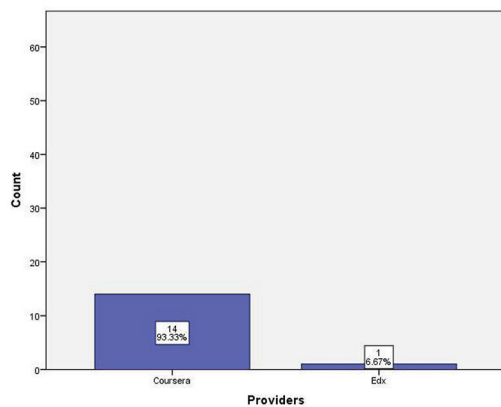


Figure 10. Benefitting from MOOC providers

## Conclusion

According to the literature review we can conclude that online learning contributes to independent and lifelong learning, which raises students' interest and motivation, develops their learning strategies and stimulates the responsibility for one's education.

The survey data summarizes the awareness and use of MOOCs among the International Black Sea University students. The data suggests that both the awareness and the use of MOOCs is very low, as 61% of students have never taken any MOOC. We recommend to take an action and increase independent access to internet among students for self-learning, within some standard university courses or any MOOC not limited to the faculty curricula.

Although 65.67 % of the students have broadband internet connection and all the necessary tools, only 39% used it for educational purposes (distance learning) at least once.

We have decided to continue the research to get more detailed information after organizing a workshop about MOOCs and MOOC providers to evaluate student feedback. We would like to study student interest and motivation concerning MOOCs, their opinions about MOOCs' potential contribution of contributes to independent and lifelong learning. Students' and educationalists' awareness should be increased through efforts of the technologically more informed instructors, who should integrate technology and web resources to the course content. It is also very desirable that Georgian legislation should be revised in order to have an accreditation perspective for distant education.

## References

- Baggaley, J. (2014). Reflection. MOOC postscript. *Distance Education*, vol. 35, iss. 1, p. 126-132.
- Diaz, V., Brown, M., & Pelletier, S. (2013). Learning and the Massive Open Online Course (A report on the ELI focus session). EDUCAUSE Learning Initiative. Retrieved October, 2, 2014 from <http://www.educause.edu/library/resources/learning-and-massive-open-online-course-report-eli-focus-session>
- Hu, H. (2013). MOOC migration: Massive open online courses are changing the way we think about higher education. *Diverse Education*. retrieved September 15, 2014 from <http://diverseeducation.com/article/52317/>
- Koller, D. Ng.A, Do, C. & Chen, Z. (2013). Retention and intention in Massive Open Online Courses. *EDUCAUSE Review Online*. Retrieved September 15, 2014 from <http://www.educause.edu/ero/article/retention-and-intention-massive-open-online-courses>
- Law of Georgia on higher education (2004). Retrieved October 2, 2014 from <http://eqe.ge/uploads/LawsRegulaions/LAWOFGEORGIAONHIGHEREDUCATION.pdf>
- Lokken, F., & Mullins, C. (2014). 2013 Distance Education Survey Results. *Trends in eLearning: Tracking the Impact of eLearning at Community Colleges*. International Technology Council (ITC): Washington, D.C.
- Mackness, J., Fai, S., Mak, J. & Williams, R. (2010). The ideals and reality of participating in a MOOC. *Proceedings of the 7th International Conference on Networked Learning*. Retrieved September 15, 2014 from <http://www.lancaster.ac.uk/fss/organisations/netlc/past/nlc2010/abstracts/PDFs/Mackness.pdf>
- Marshall, S. (2014). Exploring the ethical implication of MOOCs. *Distance Education*, vol. 35, iss. 2, p. 250-262
- McGuire, P. (2012). Got MOOC? *The Huffington Post*. Retrieved September 15, 2014 from [http://www.huffingtonpost.com/patricia-mcguire/got-mooc\\_b\\_2195053.html](http://www.huffingtonpost.com/patricia-mcguire/got-mooc_b_2195053.html)
- Nana-Sinkam, A. (2014). *Education Technology in the International Context: A Critical Analysis of Massive Open Online: Course Innovation in Sub-Saharan Africa*. Master thesis. Stanford University: Department of Communication: Stanford, CA, USA
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*. Retrieved September 15, 2014 from [http://www.itdl.org/journal/jan\\_05/article01.htm](http://www.itdl.org/journal/jan_05/article01.htm)