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# MOOCs in Kazakhstan: Internationalization and Digitization of Higher Education

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There is a shortage of data in about the role massive open online courses (MOOCs) play in internationalizing the sphere of higher education in Kazakhstan. This paper aims to explore the ways Open University Kazakhstan (OpenU), the country's first online university, is using MOOCs to foster internationalization within the "Digital Kazakhstan" policy initiative. The case of OpenU has been carefully studied by means of interviews and written reflections with the university team, and the results of this research indicate that the OpenU can be considered a pioneer university of MOOC introduction in Kazakhstan. By gaining awareness of issues related to MOOC integration and by taking well-educated actions forward, higher education institutions (HEIs) will be able to promote Kazakhstani educational programs, which are taught online by locally experienced professors to students around the world. Consequently, it will likely attract more international students by creating new online students' mobility programs. This exploratory study highlights the potential benefits and drawbacks of this trend, which is situated at the intersection of economics, education, technology and language development in Kazakhstan.

*Keywords:* massive open online courses, internationalization, digitalization, distance learning, e-learning

## The Scope of the "Digital Kazakhstan" State Program

Digital technologies have recently come to represent vitally important tools in Kazakhstan's attempt to develop human capital and strengthen its knowledge-based economy (ZNIH, 2013). The available literature indicates that currently there is no broadly accepted definition of MOOC (Pomerol, Epelboin, & Thoury, 2015), but it may be defined as the courses available for free, for all the people around the world, and which can be accessed anywhere and anytime via internet connection. In this setting, all kinds of teaching and learning activities, including final exams, are completed online. Also, the term MOOC has been used by Cristian Queinnec (2015), who was one of the first professors in teaching computer science remotely, to refer to distance learning, which includes distance evaluation and gives learners the opportunity to share their ideas together (Pomerol, Epelboin, & Thoury, 2015). For instance, the leading MOOC platform, Coursera, offers more than 2000 online courses in various spheres of work and life and 25 million learners around the world take these free online courses every year, and this number is steadily growing (Coursera, 2018). One of the major reasons for integrating MOOCs in Kazakhstan is the State Program "Digital Kazakhstan" currently being implemented, which is based on the program of "Strategic Development of Kazakhstan until 2020" initiated in 2010. The program aims to improve the quality of people's lives and competitiveness of the country through the innovative development of digital systems. The State Program "Informational Kazakhstan 2020" is also a fundamental feature of digitalization and internationalization of the educational sphere. This program aims to provide all people with an opportunity to acquire necessary professional skills with the assistance of online education. Both programs may lead the system of higher education to be integrated through online platforms (ZNIH, 2017). Specifically, the program states that strengthening the aspect of Information and Communication Technologies (ICT) will make it possible for Kazakhstan to promote its educational services worldwide more flexibly. Thus, this helps us understand that in order to gain these necessary job related-skills required by the job market today, one should start thinking about the additional educational programs, which can be acquired through recognized international online courses or by developing such e-learning courses based on the experience of international teaching staff locally.

## Aims of the State Program and Expected Benefits of MOOCs

First of all, it must be mentioned that among other social fields in this Program, the educational sphere is given the most important priority because everything starts from knowledge of certain

skills and necessary tools before applying them in the workplace. In this case, MOOCs may offer much needed knowledge and training by creating a good online teaching and learning environment. This program draws our attention to some very important objectives such as integrating continuous education and skills digitally; educational institutions would be able to develop and offer courses which will be approved by employers afterwards (ZNIH, 2017). The latter objective has shown its viability, as shown by Coursera's agreement with the Astana International Financial Centre (Coursera, 2017), which strives to be a financial hub for Asian and European countries. In this agreement, Coursera will provide its online courses to more than 1,000 employees in this Kazakhstani organization. Moreover, Coursera MOOC platform will have a partnership with AIFC Academy to design courses related to the financial system, and they aim to have a positive impact on career development of those employees (Coursera, 2017). It is also emphasized by the State Program that these objectives should be based on international experience, specifically on the implementation and integration of digital educational technologies necessary for conducting online courses. Kcell Academy, which is the educational project of the country's largest mobile network operator, has also contributed to this effort. In 2013, it offered to translate five most practical and popular Coursera's online courses for university students into the Kazakh language. This project aimed to disseminate international knowledge which was not taught at Kazakhstani HEIs, which was also an example of internationalization of HEIs (Kcell, 2013).

### **The Case of Open University Kazakhstan and the Ways of MOOCs Integration**

The most important advantage of this State Program is that it opens the way to integrate MOOCs in the higher education institutions. One of the Coursera platform's creators Daphne Koller, claims that she wants to transform passive classroom knowledge acquiring into an active online learning by making the students active participants of the whole learning process (Pomerol et al., 2015). This is, in fact, one of the objectives of Open University Kazakhstan (OpenU), which was newly established in 2017, with the support of Kcell (OpenU Project Team, personal communication, November 17, 2017). This new university pursues to integrate its MOOCs for all of Kazakhstani students, including those who are really curious about studying online (Dyussebekova, 2017). Furthermore, Open edX is the basic platform for OpenU, designed by Harvard University together with Massachusetts Institute of Technology (MIT), which proves that in the long-term, the courses provided by OpenU will be accessible for other overseas students. For example, if overseas students want to search for online courses from a specific country like Kazakhstan, they will find Kazakhstani MOOCs from OpenU in the future. This ease of access is a central component of MOOCs, and one that is driving the international discussion about internationalizing higher education (Dyussebekova, 2017). Another major goal set by OpenU is to develop online teaching and learning culture in the country. OpenU hopes that one day their MOOC project will create the ground for the Ministry of Education and Sciences to review the "Law on Education" so as to design and develop new "Educational Policy Framework" particularly for the sphere of online education of Kazakhstan (OpenU Project Team, personal communication, November 17, 2017).

As for potential benefits for students, it is a well-known phenomenon when university applicants come low-prepared for the university life after school (Heider, 2015). Universities aim to provide some experiential training like "Orientation Day" for them to get used to university system and rules. In this case, as the first step in MOOC integration by HEIs of Kazakhstan, it would be useful to follow the example of the University of Pennsylvania, which provides a MOOC for its foreign students to support them and help in understanding its university system first. This kind of MOOC includes helping students with their application forms and other necessary support related to their studies at university (Pomerol et al., 2015). The same action may be undertaken by Kazakhstani universities interested in applying MOOCs with their students and helping them to adapt to the university life before entering the university in the future.

Universities considering whether they want to spend money and time on designing their own MOOCs platforms should be also aware of some potential benefits for their institution and faculty. One of the benefits is that a university will increase the amount of its students from various regions, thus improving their status as an innovative institution, promoting their brand across the country, and meeting the need to be competitive in today's educational market. As a result, it would lead to some additional revenues to the university fund. It is worth mentioning that implementing MOOCs offers these advantages to students, but also has competitive advantages to universities

and professors who are increasingly asked to demonstrate “innovativeness”, promote a brand, and add revenue to the university. Moreover, MOOCs will likely become a complementary educational tool of current institutions rather than a substitution for them (Belleflamme & Jacqmin, 2016).

These purported benefits are important for Kazakhstani HEIs context to explore as they consider implementing MOOCs in Higher Education Institutions from the perspective of further internationalization.

### **Further Possible Developments of the Program within the Framework of Internationalization**

There is still considerable uncertainty with regards to the internationalization of higher education by integrating MOOCs, and this has not been dealt with in depth in the State Program. This kind of pitfall is understandable because “Digital Kazakhstan” has been recently launched and in the process of active development and improvement. Moreover, the program highlights the importance of the fact that some Kazakhstani HEIs included in Top 800 Universities Rankings by QS World Universities Ranking System may have a great impact on internationalization of HEIs as well. It suggests that the amount of foreign students will gradually increase, which will influence the growth of internationalization of higher education in the country as well (ZNIH, 2017). In this case, the phenomenon of MOOCs in HEIs under the OpenU project may become a starting point for the internationalization of Higher Education of Kazakhstan. Already, OpenU collaborates with Kazakhstan’s leading and internationally well-known universities such as Kazakh National Technical University, Kazakh-British Technical University (KBTU), Almaty Management University (AlmaU), the Institute of Mathematics and Mathematical Modelling and Suleyman Demirel University (SDU) (OpenU Project Team, personal communication, November 17, 2017). All the current courses in OpenU are designed and planned by local experienced professors and instructors in Kazakh language, which will have subtitles in English and Russian languages. Therefore, these MOOCs may possibly serve both as integrating international educational programs to Kazakhstan’s HEIs and exchange of its own educational context with other international HEIs around the world online (Dyussebekova, 2017).

Also, recent research has highlighted several very important MOOCs features that should be taken into account while developing the full potential of HEIs and its learners. Firstly, the second acronym ‘O’ stands for ‘open’, which means that students will not need any pre-requisites, entry tests or other forms of knowledge verifications before enrolling in the courses they want to take. Secondly, the students will be able to earn a digital certificate to prove that they had taken the course in a certain university and that they have completed and gained the necessary knowledge (Belleflamme & Jacqmin, 2016). This part has not been designed by OpenU yet, but they are actively working on this issue through collaboration with partner universities (Dyussebekova, 2017). It is necessary to mention that Open provides certificates of achievements for the completion of their small scale online courses for free. On the other hand, Coursera provides certificates for certain fees for the completion of their courses and this is the main difference between OpenU MOOCs and Coursera MOOCs. Thirdly, in a MOOC environment, there are various interactions and communications between learners that happen through doing different online assignments, like working on group projects or discussing various topics in a special forum. Learners can easily get used to different forms of instructions like watching and stopping the videos anytime. These features are essential parts of any MOOC, and they help to create a comfortable online learning environment for all learners, regardless of their intellectual capabilities and learning styles (Belleflamme & Jacqmin, 2016). Thus, it can be concluded that these features can aid the Ministry of Education and Sciences of Kazakhstan as it reconsiders the impact of online education and its importance for HEIs to start integrating it into Kazakhstani educational programs as well.

### **Prospective Issues of the State Program**

The “Digital Kazakhstan” State Program refers to the educational sphere as a whole and does not refer to specific levels of education in a detailed format. This lack of specificity may limit the effect of the policy, but offers a unique opportunity for researchers and scholars to understand and adapt the program’s objectives in practice.

Despite the potentially positive impacts from MOOCs on HEIs in the future, there may also be some drawbacks in terms of the difference between an ordinary in-class learning and the virtual environment (Belleflamme & Jacqmin, 2016). It seems that these issues may decrease soon because every year new technologies, which improve learners’ collaboration and overall teaching and learning process, develop increasingly fast just like the same as the evolution of the Internet nowadays, which gives us information in a few simple clicks. Thus, it can be emphasized that the online educational tools will make the system of integrating MOOCs faster and easier for HEIs (Belleflamme & Jacqmin, 2016). On the other hand, one of the objectives of the State Program is aimed at developing additional online courses to comply with the employer’s requirements (ZNIH, 2017). Consequently, it means that HEIs should at least consider integrating MOOCs because it may create opportunities for them to be innovative and competitive in the future. Those that ignore MOOCs may risk falling behind in this new form of HE internationalization. Naturally, MOOC designers see MOOCs as a possible replacement for the current institutional system. For example, one of the Udacity MOOCs platform’s founders Sebastian Thrun claims that with the popularity of MOOCs there may be just no more than 10 universities around the world in 50 years (Godwin-Jones, 2014). Although MOOCs may more likely become additional tools than a complete substitution of the HE model (Belleflamme & Jacqmin, 2016), HEIs should be taking notice of this important new trend. This can be associated with an optimistic view that any person worldwide would be able to get first class educational experience via Internet technologies. Moreover, it should also be mentioned that the English language remains the main language of instruction in the majority of MOOC platforms nowadays. This aspect is clarified further as the English language dominates in internationally well-known academic journals and is used by many non-native English speakers for writing and conducting their research (Altbach, 2013). OpenU also aims to translate their MOOCs into English to attract an international audience to their courses in the future (Dyussebekova, 2017). As the result, the OpenU initiative is situated in a complex discourse about internationalization that is affected by economics, education and language.

### **Further Considerations of MOOCs Integration into HEIs**

At first, it may seem that the phenomenon of MOOCs has been overstated, but particularly local HEIs may take into account this new process of internationalization of higher education and develop their own MOOCs to comply with worldwide demands in this sphere. Also, based on an understanding of current steps and issues related to MOOCs integration and by taking well-educated actions forward, HEIs will be able to promote Kazakhstani educational programs, which are taught by locally experienced professors online around the world, and consequently, it will help to attract more international students by creating new online students’ mobility programs.

As a result, MOOCs can create a great level of students’ autonomy in acquiring knowledge and skills they need. This can be considered as a positive impact on student-centred lessons, where professors just communicate the instructions, give guidance on how to do assignments and finally grade their students based on their overall performance on the course.

All in all, this analysis of current the local Innovative State Program “Digital Kazakhstan” demonstrates that there is a feasible potential for integrating MOOCs within the framework of Program. This will likely foster internationalization, but there may be some roadblocks ahead in terms of investment, time and overall benefits of MOOCs for universities. For that purpose, this analysis needs further extended research to identify those issues for further integration and benefits for the higher education system and its internationalization in Kazakhstan.

## References

- Altbach, P. G. (2013). MOOCs as neocolonialism: Who controls knowledge? *The Chronicle of Higher Education*. Retrieved from <http://www.chronicle.com/blogs/worldwise/moocs-as-neocolonialism-who-controls-knowledge/33431>
- Belleflamme, P., & Jacqmin, J. (2016). An economic appraisal of MOOC platforms: Business models and impacts on higher education. *Cesifo Economic Studies*, 62(1), 148–169. doi:10.1093/cesifo/ifv016
- Coursera. (2017, January). *Announcing Coursera for governments & nonprofits*. Retrieved from <https://blog.coursera.org/announcing-coursera-governments-nonprofits/>
- Coursera. (2018, May). *About*. Retrieved from <https://about.coursera.org/>
- Godwin-Jones, R. (2014). Global reach and local practice: The promise of MOOCs. *Language Learning & Technology*, 18(3), 5–15. Retrieved from <http://llt.msu.edu/issues/october2014/emerging.pdf>
- Heider, J. (2015). Using digital learning solutions to address higher education's greatest challenges. *Publishing Research Quarterly*, 31(3), 183–189. doi: 10.1007/s12109-015-9413-8
- Kcell. (2013, May). *Coursera will speak Kazakh*. Retrieved from <https://old.kcell.kz/en/article/2019/561>
- Pomerol, J. C., Epelboin, Y., & Thoury, C. (2015). *MOOCs: Design, use and business models*. Retrieved from Wiley Online Library. doi:10.1002/9781119081364
- Dyussebekova, Z. (2017, April). *OpenU-Kazakhstan's massive open online courses*. Retrieved from <https://astanatimes.com/2017/04/openu-kazakhstans-massive-open-online-courses/>
- ZNIH (Zerde National Infocommunication Holding). (2013, January). *Informatsionnyi Kazakhstan-2020* [Informational Kazakhstan-2020]. Retrieved from <https://zerde.gov.kz/upload/iblock/dec/gp-ik-2020.pdf>
- ZNIH. (2017, September). *Gosudarstvennaya programma "Tsivrovoi Kazakhstan" na 2017–2020 goda* [Digital Kazakhstan State Program for 2017–2020]. Retrieved from <https://zerde.gov.kz/images/ГП%20Цифровой%20Казахстан%20на%202017–2020%20годы.pdf>