MASSIVE OPEN ONLINE COURSES AS A MEANS OF BORDER GUARDS’ PROFESSIONAL COMPETENCE DEVELOPMENT

Abstract. Massive open online courses (MOOCs) have attracted a great deal of interest in recent years as a modern learning technology. This paper examines the issue of developing professional competencies in further training of border guards through MOOCs. Mobile learning, distance education, use of the information technologies have been differentiated. The preparation for lifelong learning is especially important for border guards due to the rapid development of the information technology. Further education helps them counter threats to national security, conflicts and non-standard situations at the border crossing points, and new methods violators use to forge documents, to smuggle goods and to cross the state border. The use of MOOCs for advanced training in the State Border Guard Service of Ukraine has been analyzed. The purpose of the article is to analyze the application of MOOCs for developing professional competencies of border guards. Each MOOC is aimed at developing the Integral competence, General competencies and Professional (special) competencies of border guard officers. The ability to communicate in English is one of the special competencies of border guards, and it is essential for effective protection of the state border. The peculiarities of development of MOOC “Conducting the second line check at border crossing points” for training of border guards who serve in the border guard units and want to be promoted to higher positions have been investigated. The experiment was carried out at the Bohdan Khmelnitskyi National Academy of the State Border Guard Service of Ukraine and involved 276 border guards. The analysis of the results of the developed distance course testified its effectiveness. The generalization of feedback from the participants in this course also indicated an increase in the motivation of border guards to develop personal professional skills, especially for communication in a foreign language. The results of the study have been further discussed and the practical suggestions for MOOC developers have been outlined.
Keywords: massive open online courses (MOOCs); mobile learning; distance education; border guards; foreign communication skills.

1. INTRODUCTION

The problem statement. Modern pedagogy is characterized by reinterpretation and change of many approaches to training of future specialists and by abandonment of some traditions and stereotypes. The current situation requires from a teacher high professionalism, mastering of modern teaching technologies, wish and ability to constantly study and improve, and using creative approaches. New approaches determine the main social task of training, which consists not only in providing educational services, but also teaching future specialists to study independently and constantly deepen personal knowledge, forming cognitive motivation and ability to quickly orient in the swift stream of scientific information. There is also a necessity for syllabus updating, increase of the role of fundamental modern knowledge and abilities of interdisciplinary character, integrated learning of general and professional disciplines, and especially the use of the up-to-date information technologies (IT) in the educational process [1].

The preparation for life-long learning is especially important for future border guards due to the rapid development of the information technology. The problem is that after graduation most border guards are satisfied with the achieved level of education. But serving at the state border, they encounter threats to national security, conflicts and emergency situations at border crossing points (BCPs) as well as new methods to forge documents, to traffic illegal migrants, to smuggle in prohibited items, and to cross the state border illegally. Consequently, they often realize that they are not ready to solve the emerging problems.

To solve these problems, we suggest implementing MOOCs in the learning process both at the Bohdan Khmelnytskyi National Academy of the State Border Guard Service of Ukraine (NASBGS) and for independent work of border guards performing their duties at BCPs. It will facilitate further professional development, increase the level of border guards’ knowledge and enhance their professional activities.

Analysis of recent studies and publications. The increasing influence of IT on educational process resulted in the scientific problem dealing with the efficiency of MOOCs aimed at providing effective professional training. Researchers have paid much attention to e-learning (A. Alsabawy, K. Alshare, P. Bentler, O. Burov, A. Cater-Steel, H. Chang, J. Cheon, S. Cheung, G. Clough; D. Compeau, G. Conole, S. Crooks, M. d’Aquin, R. Edmunds, R. Freeze, J. Gikas, M. Grant, I. Han, C. Higgins, G. Hwang, A. Jones, K. Jordan, H. Kim, E. Ko, J. Lam, P. Lane, S. Lee, S. Park, E. Scanlon, M. Shalatska, J. Soar, J. Song, M. Thorpe, J. van Braak, H. Wen, J. Yau). Also there are a lot of studies on computer training and use of ICT at classes (A. Avramchuk, N. Borysko, V. Drozdova, Y. Krapchatova, N. Paziura, K. Rudnitska, A. Tomilina; C.-K. Huang, N. Maiier, M. Ashby, Y. Kim, J. Maidment, Ch. de Bruijn, L. Fang, J. Zhou) and use of massive open online courses (S. Bayne, A. Fife, J. Hammer, M. Israel, J. Knox, A. Littlejohn, H. Macleod, R. Marx, C. Milligan, M. Neil, A. Ogan, M-J. Ross, C. Sinclair, J. Uchidiuno, E. Yarzebinski).

Despite the numerous research works concerning this problem, improving the quality of professional training through the use of MOOCs for the career development of border guards is quite topical.

The article’s goal. The aim of the article is to analyze the possibilities of applying MOOCs for border guards’ further education as a part of their career development and to characterize the specific features of the MOOC “Conducting the second line check at BCPs” aimed at upgrading foreign communication skills which are among the border guards’ essential professional competencies.
2. THE THEORETICAL BACKGROUNDS

Learning becomes especially valuable as it forms the ability to adapt to the changing social reality and helps connect fragmentary elements of knowledge and experience into meaningful patterns. At the same time, distance learning formats, such as online courses and self-study materials, are more learner-centered and can flexibly adapt to the changing needs of the society, thus making an attractive option for self-development and becoming the central element of irreplaceable life-long “equipment” [2].

ITs are used on the different levels of organization of educational process in basic, vocational, higher and postgraduate education and in various institutions: educational establishments, scientific and other establishments as well as in organizations providing educational services. The use of IT enables to improve the level of educational processes related to evaluating educational achievements, testing and organizing new approaches on its basis. Modern youth better perceives educational material on electronic media than in the printed form. The use of modern technologies also helps to develop creative abilities of future specialists. It is especially important nowadays when the volumes of mental work increase and creative decisions in all spheres of professional activities are required [3].

Oleksandr Burov (2016) has identified the following new opportunities offered by e-learning: “flexibility of education programs – a student can choose courses, teachers, time of active work, etc.; individualization of education process – re-allocate time and education resources in dependence on a student’s individual psycho-physiological possibilities to make this process more intensive and to give equal opportunities for both common people and people with disabilities” [4].

Mobile education appears as a new approach of the electronic education development that provides for active use of mobile technologies and equal access to ITs. It was triggered by the Bologna process aimed at implementing adaptive learning. Nowadays the mobile learning is in the process of formation and considerable development based on availability of technical means for it and realization of mobile access to educational resources.

As mobile technology has matured sufficiently in recent years to support advanced learning activities, its adaptation for this purpose has spread globally. It is natural that students are surrounded by mobile technology in their daily lives. Additionally, the proliferation of advanced wireless technologies has facilitated learning on the go, whereby individuals can access educational content regardless of their location. Mobile technology also offers various opportunities for timely and active knowledge acquisition through the exchange of learning materials [5; 6].

Mobile technology possesses great potential in offering rich multimedia experiences and resources of a varied nature while enabling students to learn without being restricted by time or location in both formal and informal educational settings [7; 8].

But the availability of mobile technology does not actually guarantee that it will be used in an educational setting [9]; similarly, the mere adoption of a new technology does not assure its learning effectiveness. Mobile technology helps to provide distance education. As MOOCs are a relatively new technology, limited research has been carried out on some of their aspects, such as learning success and perceived benefits [10; 11].

MOOCs became main stream in 2012, completion rates have been a controversial topic. The emancipatory effect of free online access to education allows students to take what they need from MOOCs to meet their own learning goals without formally completing courses; to examine completion rates is potentially misleading [12; 13].

MOOCs present a rapidly growing and potentially disruptive innovation in the field of online learning, as they are empowered with modern technology capabilities and the potential to impact the lives of millions [11].
Robin Bartoletti emphasizes that exploring new pedagogical approaches and technologies in learning experience such as MOOCs offers educators a clear opportunity to reflect on and expand their teaching methods and document effective practices [14]. In particular, Charles Robinson, Hunter Gehlbach and Chris Hulleman have determined opportunities for predicting success in teaching students at MOOC and other forms of open online learning [15].

Asha Kanwar notes that a MOOC is a form of distance and online learning. The researcher underlines the speed of propagation of online courses in the world [16].

Jamin Bartolomeo (2015) pointed to fundamental features of MOOCs: “(a) courses are open access, which means that anyone with Internet access may participate for free, and (b) courses are created using online platforms that can accommodate large numbers of users” [17].

Changes in all spheres of human activities result in the knowledge obtained at higher education institutions rapidly getting old, professions being constantly updated, information flows fast increasing in volume, which is why majority of professionals feel necessity of knowledge updating. The obtained profession is no longer a guarantee of life-long employment. Dynamism of modern life does not allow modern border guard officers to carry out their professional duties and to use obtained knowledge in practice while having only academic education. It is conditioned by the fact that a system of knowledge changes cardinally within 5-7 years. Thus, it is necessary for a modern border guard officer to improve and develop their system of knowledge [18].

Therefore, it is important not only to improve your own professional level but also to engage in life-long (continuous) education. One of the forms of continuous education of military specialists is the system of further training. Its development is the necessary condition of support of professional status of border guard officers.

Organization of continuous education of border guard officers in the State Border Guard Service of Ukraine (SBGS) is based on functioning of distant education network that provides the required quality of education. In the process of its functioning the unity of content and methodological environment is provided. It creates the real possibilities of support of equal level of education in all structural units of the State border. The use of modern information and communication technologies allows border guards to have equal possibilities for obtaining education while performing duties and staying at the state border [19].

Continuous education makes it objectively real to acquire education during the whole period of professional activities and provides the most favorable conditions for continuity of educational and professional development [20].

The use of network technologies in the system of postgraduate studies of border guard officers is the basis for the various additional possibilities: communication with the aim of professional exchange of experience with colleagues who work on analogical problems; different forms of collaboration with the aim to implement joint projects; an exchange of experience between representatives of postgraduate studies at various higher educational institutions.

The basic tasks of the distance education in the system of postgraduate studies of border guard officers are: to give border guards possibility of on-the-job professional improvement; to individualize the process of education with the orientation at abilities and level of professionalism; to make the process of postgraduate studies more open, continuous and flexible (joining courses on free and continuous basis, choosing individual programs, terms and rate of postgraduate studies); to level differences in the system of postgraduate studies of border guards who serve at different units of the state border; to cut down expenses on postgraduate studies.
The system of postgraduate studies of border guard officers has the possibility to implement distance learning based on needs analysis and considerable experience of border guards serving at the border. Knowledge of psychological and professional features, ability to detect the problems in professional activities enable instructors to design meaningful professional courses, to conduct diagnostics and to carry out an educational process on this basis. Postgraduate studies are conducted by qualified specialists that have sufficient experience in organization of such courses; the system of postgraduate studies has an experience of administering full-time and extra-mural courses. Conducting courses with a specially organized mode of independent work of border guards provides for their joint activities together with instructors on planning, methodological and didactic support, and makes it possible to develop micromodels of distance learning that can be integrated in the general system of studies.

The current education system needs some changes because it is expected to prepare future professionals, to form their research skills, and to ensure their continuous lifelong learning. Neil P. Morris noted, “We must adapt the ways that students are taught and learn in Higher Education as this will impact on their skills, competencies and ability to contribute effectively in a digital workplace and society” [21].

3. RESEARCH METHODS

At the various stages of the research, the following methods were used: theoretical – analysis and generalization of scientific literature connected with the research problem; review of articles and monographs on implementation of MOOCs into the teaching and learning process – to find out the definitions and concepts of the problem; empirical methods – observations, questionnaires, interviews to check the initial level of skills; analysis, synthesis, generalization, systematization – to analyze the curriculum in various courses of SBGS; investigation to check effectiveness of implementation of MOOCs in the curriculum of border guards’ independent work; methods of mathematical statistics.

The experiment was carried out during January-December 2017 at Bohdan Khmelnytskyi National Academy of the State Border Guard Service of Ukraine. It involved 276 border guards who serve at NASBGS.

4. THE RESULTS AND DISCUSSION

In order to improve the level of education, to maintain the appropriate level of combat readiness and professional skills, the main objectives for training border guards at the NASBGS are as follows:

− to develop a practical component in the training system of border guards, taking into account the experience of combat employment of border guard units and threats to border security;
− to further improve the system of border guards’ professional training in order to ensure their readiness for actions under conditions of rapid situational changes;
− to further enhance the system of training for the reserve subordinated directly to the Head of the State Border Guard Service of Ukraine and the antiterrorist unit of the National Academy in order to ensure its readiness for intended actions in the conditions of a rapid change of the situation at the state border, counteraction to unlawful activities at the border;
− to develop the system of professional training for border guards which will help them to effectively perform duties on the border while acting on behalf of the state, to
create high standards of activity that correspond to European norms within the framework of the project “New Face of the Border” in the SBGSU;

− to provide effective functioning of the system for assessing and monitoring the service results of post graduates (feedback) in the chain ‘border protection bodies – the Academy’ with the aim to ensure and improve the level of basic training of border guards;

− to provide planned training of border guards who are sent for service in the area of the Joint Force operation, further improve the system of further education courses for various categories of border guards.

Further education courses are conducted in a distance-learning form of education and are carried out in two stages: 1st stage – self-study of educational materials, implementation of practical tasks, test control of mastering the educational materials; 2nd stage – practical lessons and final test at the NASBGS. Border guards who met all the requirements of the curriculum and successfully completed the test are admitted to the 2nd stage.

There are various MOOCs for advanced training of officers at the NASBGS (Fig.1): “Conducting the second line check at BCPs”, “Organization of work at BCPs while localizing stressful, conflict and crisis situations”, “Organization of border checks at BCPs for chiefs of border guard divisions, chiefs of sections of border guard inspectors, shift leaders of border details”, “Training for officers of type “C” BG divisions and mobile border posts”, “Training in the English Language (English terminology used at EU BCPs for border checks) with personnel serving at BCPs”, “Training for personnel working with foreigners and administrative proceedings of state border guard bodies”, “Organizational and legal foundations for the detention of persons in temporary holding facilities of border guard bodies (units) of the SBGSU”, “Training for chiefs of border guard divisions and candidates for appointment as chiefs of border guard divisions”, “Training in fundamentals of human rights. International Humanitarian Law”, “Personnel provision of bodies and units of the SBGSU”, “Training in the English Language”, “Basics of combined combat”, “Chiefs of sections of border guard Inspectors, shift leaders of border details”.

Fig 1. Front page of the distance learning centre of SBGS (in Ukrainian)
Each MOOC is aimed at forming the Integral competence, General competencies and Professional (special) competencies of border guard officers. **Integral competence** is generally the ability to solve complex problems and problems in the field of national security providing inviolability of the state border and protection of sovereign rights of Ukraine in its exclusive (marine) economic zone in the conditions of the differentiated safety environment. **General competencies** are: ability to think critically, analyse and synthesize; knowledge and understanding of professional duties; ability to communicate in a foreign language; skills in ICT use; ability to study and master modern knowledge; ability to search, process and analyse information from different sources; ability to make well-grounded decisions; ability to communicate with representatives of other professional groups of different levels (experts from other fields of knowledge); ability to appreciate and respect diversity and multiculturalism; ability to work in an international context; ability to plan and manage time; ability to evaluate the quality of executed tasks. **Professional (special) competencies** are: ability to generalize the practices of applying legislation on issues belonging to the competence of SBGS and other components of the security and defence of Ukraine; ability to develop and implement general principles of legalization, to provide the inviolability of the state border, and to protect the sovereign rights of Ukraine; ability for the strategic planning of SBGS development and introduction of innovations; ability to manage activities of a central executive body exercising the public policy in the field of the state border protection and to control its structural units in everyday conditions, under the conditions of aggravated military and political situation, during localization and neutralization of crisis situations aimed at the fight against the organized crime, terrorism, activities of illegal militarized or armed formations (groups), and illegal migration; ability to communicate with the bodies responsible for providing national security, performing co-ordinating functions, establishing strategic communications with public; ability for organization of collaboration on border issues and on questions of the mutual journeys of citizens on international and intergovernmental levels; ability to provide legality, respect and observance of rights and freedoms of citizens; ability to communicate in English for professional purposes at B2 level, etc.

The ability to communicate in English is one of the essential competences border guards are required to have in order to ensure efficient border control on the state border. Being aware of the importance of English for border guards in conducting their service duties, the SBGS tries to find ways for organizing the English language training for its personnel. The SBGS is being reformed in order to comply with the Schengen standards of European Union. One of the Schengen requirements is staffing of the Ukrainian BCPs with personnel who freely enough communicate in English with foreign tourists, discuss trans-border cases with international colleagues, and participate in international training and professional conferences. The modern concept of border guards training is predefined by considerable changes in socio-economic life of the country and globalization of world economy, by transformation of professional functions and status of border guards.

According to the official duties, border guards communicate with people that cross the state border during border control, passport control, documents checking, vehicle and goods inspection. It is necessary to follow the standards of communication that are based on observance of rights and freedoms of citizens, politeness, restraint, culture and laconic brevity. Within the limits of their functions, border guards must communicate in a foreign language during the meetings of border representatives, when conducting interviews with foreigners, participating in international events and joint operations. Therefore, foreign communicative skills are among the professional competences to be formed with border guards during their further training.

The MOOC “Conducting the second line check at BCPs” is designed for the SBGS staff who need to increase their professional competence and upgrade English speaking skills.
The training course is based on the following topics: “Organization and execution of checks of passports and other documents of citizens of Ukraine, foreigners and stateless persons crossing the state border”, “Preparation of border details for service at BCPs”, “Technological protection of documents. Methods of falsification and simulation of technological protection elements”; “Polygraphic protection of documents. Methods and technologies for printing documents, possible ways of falsifying polygraphic protection”; “Physical and chemical protection of passports and documents. Optically variable means (holograms, kinegrams, laminating films), printing inks”; “Protection of personal data. Personalization of identification documents. Ways to replace a photo and integrated photos”; “Common ICAO international standards for travel documents. Machine-readable documents”; “The basics of biometrics. Electronic identity documents”; “Technologies for falsification of documents. Complete, partial and intellectual falsifications. Methods of detecting falsifications in identification documents”; “Methods for drawing up a warning about the detected counterfeit document, an application for in-depth verification of the document and a report on its results”; “Statistics and analysis of falsifications detected during border control at BCPs”; “Fundamentals of psychological observation of persons crossing the state border of Ukraine. Peculiarities of behavior of persons who have violated or are trying to violate the state border”; “Profiling and identification of persons crossing the border”; “The procedure for organization of supervision over border guard details, which perform duties at BCPs”; “Conduct of the second line check of foreigners and stateless persons. Peculiarities of conducting an interview”.

The access to each of the following topics will be available to border guards after the end of the previous one. Each module is divided into lessons. They can be reached from the main menu. The conducted analyses showed that the most effective and interesting lesson in MOOC “Conducting the second line check at BCPs” was “Conduct of the second line check of foreigners and stateless persons”. So, the peculiarities of conducting this very lesson are further revealed in order to present the methodology and the approach taken. This MOOC was conducted in English with the aim to upgrade English speaking skills. Different types of foreign language training exercises have been worked out: filling in the gaps, multiple choice, crossword puzzles, rearranging, matching, mixed-up sentences, which are based on the previous experience of executing service activities at the border. The border guards are familiar with such activities, so it is possible to simulate situations with real communication. These exercises increase motivation and are done with enthusiasm. Each lesson consists of such subunits as vocabulary, phrases, listening, video and exercises. So border guards have the possibility to learn new lexical material and phrases and to practice them while doing various tasks.

Usually we start the lesson with such effective method as a warming up (brainstorming). Activity: Document checking. Instructions: Name the parts of documents: date of issue, date of expiry, authority, machine readable zone, number of entries, nationality, etc.

For vocabulary learning (pre-reading activities) such activities are used: matching [Fig.2], synonyms, antonyms, and comprehension.
Activity: Synonyms. Instructions: Give English synonyms to the following terms: border, adjacent, carry out duties, border crossing point, to combat, to enhance, to implement, cooperation, to inspect, documents, foreigner, purpose, to examine, to produce.

Activity: Antonyms. Instructions: Give English antonyms to the following terms: forged documents, legal, to allow, to control, security, to find.

Activity: Comprehension. Instructions: Give Ukrainian equivalents for the following word combinations: to enter or leave a country; passport control officers; to check the travel documents presented by citizens; to have the right to enter the country; entry documents.

After familiarisation with key terms and expressions border guards do the following activities: reading, post-reading exercises, listening (watching), and grammar exercises. Post-reading exercises include: answer the questions, true and false statements, complete the sentences with appropriate words or phrases, fill in the gaps.

Activity: Gap-filling. Instructions: Fill in all the gaps with the given words: This is the process whereby a printing, ________, laser engraving or photographic technique is used, as opposed to a typewriter or writing by hand to incorporate an image, a photograph of the holder, a signature or ______text directly into the substrate or ______during personalisation.

Activity: True/False statement. Instructions: Decide whether the following statements are true (T) or false (F): 1) Passport control officers fill in the travel documents presented by citizens, residents, and other travellers. 2) All countries have strict regulations regarding allowing noncitizens to enter their borders. 3) In airports or seaports, travellers will typically meet with border control agents in a separate building.

For listening and watching we propose such activities: listening. Instructions: Listen to the dialogue “Applying for asylum at the border” and fill in the gaps by choosing a word from the list: apply for, escaped, risk, status, successful, surrender: 1) Non EU-nationals cannot ______ in the Schengen area as long as they want since they are ______ a visa system. 2) According to the ______ of their stay and to the means, they ______ a specific visa. 3) There are many ______ of visa from tourist to labour ones.

Activity: Video Quiz. Instructions: Watch the video and find correct answer: 1. What draws the attention of the BG when checking the passenger’s travel document? 2. Does the passenger have any other documents: ID card, driving license etc.? 3. What makes the BG decide to check the passenger’s circumstances very carefully?

In order to learn grammatical forms, we use such activities as: fill in prepositions, complete the sentences, open the brackets, sort out mixed-up sentences.

Instructions: Open the brackets, using Present Simple or Past Simple: 1) The violators (to detain) last night. 2) A new approach to the training of cadets (to implement) in 1999. 3) The borders (to guard) vigilantly. 4) All the passengers travelling to Ukraine (to be inspected) by border guards and customs officials.
Activity: Mixed-up sentences [Fig.3]. Instructions: Arrange the words to form a sentence: an ? you have do invitation letter; did decide what the border guards? why from you to hide; is leader the group of the who?

Fig. 3. Mixed-up sentences

To master speaking activities we recommend such activity as Interview. Students should learn special questions to interview a violator of the State border (What is your permanent residence? What is the purpose of your visit to Ukraine? Do you have any documents that confirm the purpose of your trip? Who is meeting you in Ukraine? Why did you choose Ukraine for employment/study? Do you have any weapons or drugs with you? etc.) and then practice them. Activity: Interview. Instructions: Ask all possible questions to clear up the situation: 1) During border patrolling you have found a Turkish bus with illegal migrants. Interrogate and identify one of these persons. 2) An intruder was detained while attempting to cross the State border of Ukraine illegally. Make up a questionnaire to identify his personality and the reason of illegal migration.

The Assessment section involves performing tasks for checking the material being studied. It is also available from the main menu. Students must give 80% of the correct answers in order to successfully complete the test. If they do not succeed, they will be able to retry the module or individual lessons.

The approbation of the course “Conducting the second line check at BCPs” lasted from January to December of 2018. During this period, 276 border guards, who serve in border guard units and want to be promoted to higher positions, became participants in the training program.

At the beginning of experiment, the initial assessment on the foreign communication skills was conducted to determine the level of officers’ English language knowledge, and at the end of experiment, the final assessment was carried out in order to compare results. As a result of the initial assessment conducted in January, 2018, the following grades were received: 77 (28%) officers had the high level of foreign communication skills (5A); 100 (36%) had the middle level (4B/4C); 99 (36%) – the low level (3D).

As a result of the examination conducted in December, 2018, the following grades were received: 97 (35%) officers demonstrated the high level of foreign communication skills and received 5A increasing the total of high level by 7%; 115 (42%) of course participants were finally graded as 4B/4C (middle level) showing the increase of 6%; and the number of low level grades decreased by 13% as only 64 (23%) officers were assessed as 3D (see Table 1).
Table 1

Dynamics of border guards’ foreign communication skills before and after the course “Conducting the second line check at BCPs”, n=276

| Grades     | At the beginning of experiment | In the end of experiment |
|------------|-------------------------------|--------------------------|
|            | Persons | %     | Persons | %     |
| High level | 77      | 28    | 97      | 35    |
| Middle level | 100   | 36    | 115     | 42    |
| Low level  | 99      | 36    | 64      | 23    |

In order to interpret the progress of border guards participating in the course, we made a comparison between the scores of border guards’ pre-test and post-test. Based on quantitative and qualitative comparative results analysis, the efficiency of MOOCs “Conducting the second line check at BCP” was identified. According to the results of the distance course, the average score of the border guards increased from 3.92 to 4.11 points. In order to interpret results, the following formula was used:

\[
\sum (x_1 \times f_1) + (x_2 \times f_2) + (x_3 \times f_3)/n = \sum n = G.P.A.
\]

where \(x_1, x_2, x_3\) – grades (5A, 4B/4C, 3D);
\(f_1, f_2, f_3\) – number of border guards who obtained some grade;
\(n\) – total number of border guards;
\(G.P.A.\) – grade point average.

\[
\sum (5A \times 77) + (4B/4C \times 100) + (3D \times 99)/276 = (385+400+297)/276 = 1,082/276 = 3.92
\]
(pre-test results).

\[
\sum (5A \times 97) + (4B/4C \times 115) + (3D \times 64)/276 = (485+460+192)/276 = 1,137/276 = 4.11
\]
(post-test results).

This indicates the effectiveness of the training course “Conducting second line control at BCPs”. The generalization of feedback from the participants in the training program on this course also indicates an increase in their motivation to improve border guards’ professional training.

5. CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH

1. The preparation for life-long learning is especially important for border guards due to the rapid development of the information technology. After graduation most border guards are satisfied with their achieved level of education. But serving at the state border, they encounter threats to national security, conflicts and emergency situations at BCPs as well as new methods to forge documents, to traffic illegal migrants, to smuggle in prohibited items, and to cross the state border illegally. Consequently, they turn out to be not ready to counteract the problems faced.

2. To solve these problems, we suggest implementing MOOCs in the learning process both at the NASBGS and for independent work of border guards performing their duties at BCPs. It will facilitate further professional development, increase the level of border guards’ knowledge and enhance their professional activities. There are various MOOCs for advanced training of border guards at the NASBGS. MOOCs are conducted in a distance-learning form of education and carried out in two stages: 1st stage – self-study of educational materials, doing practical tasks, test control of mastering the educational materials; 2nd stage – practical lessons and final test at the NASBGS.
3. Foreign communicative skills have become an important issue in the last years. There is a need for development of English proficiency of SBGSU officials because the ability to communicate in English is one of the professional competences of border guards required to provide efficient border control at BCPs. The MOOC “Conducting the second line check at BCPs” consists of 15 themes and is designed for the SBGS staff who need to increase their professional competence and upgrade English speaking skills. The approval of the course lasted from January to December of 2018 and involved 276 border guards, who served at border guard units. Based on quantitative and qualitative comparative analysis of results, the efficiency of MOOCs “Conducting the second line check at BCPs” was confirmed. According to the distance course results, the average score of the of border guards increased from 3.92 to 4.11 points, which testifies to the effectiveness of the training course.

This research does not cover all aspects of the outlined problems. Further scientific research is seen in the study on the implementation of MOOCs in the training of border guards of different specialities.

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МАСОВІ ВІДКРИТИ ОНЛАЙН КУРСИ ЯК ЗАСІБ РОЗВITКУ ПРОФЕСІЙНИХ КОМПЕТЕНТНОСТЕЙ ПРИКОРДОННИКІВ

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Анотація. За останні роки масові відкриті дистанційні курsci (МВДК) викликали великий інтерес як сучасна технологія навчання. У статті розглядається питання розвитку професійних компетентностей при підвищенні кваліфікації прикордонників через МВДК. Розмежовано поняття «мобільне навчання», «дистанційне навчання», «використання інформаційних технологій». Підготовка до навчання протягом усього життя особливо важлива для прикордонників під час швидкого розвитку інформаційних технологій. Подальша освіта допомагає їм противистяти загрозам національний безпеці, конфліктах і нестандартним ситуаціям у пунктах пропуску через державний кордон та новим методам дій порушників щодо підробки документів, переміщення контрабанди, перетину державного кордону. Проаналізовано застосування масових відкритих дистанційних курсів. Метою статті є аналіз застосування МВДК для розвитку професійних компетентностей. Кожен МВДК спрямований на формування інтегральної компетенції, загальних компетенцій та професійних (спеціальних) компетенцій офіцерів прикордонної служби. Здатність спілкуватися англійською мовою є однією зі спеціальних компетентностей прикордонників та ключовою для того, щоб здійснювати охорону державного кордону. Розглянуто особливості розробки МВДК «Проведення контролю другої лінії в пунктах пропуску через державний кордон» для підготовки прикордонників, які проходять службу в підрозділах на державному кордоні та хочуть отримати підвищення по службі на вищі посади. Експеримент було проведено в Національній академії Державної прикордонної служби України імені Богдана Хмельницького за участю 276 прикордонників. Аналіз результатів дистанційного курсу засвідчив ефективність розробленого навчального курсу. Узагальнення зворотного зв'язку від учасників навчальної програми з цього курсу також засвідчило про підвищення мотивації прикордонників до розвитку особистих професійних навичок, особливо щодо спілкування іноземною мовою.

Ключові слова: масові відкриті дистанційні курsci (МВДК); мобільне навчання; дистанційне навчання; прикордонники; підвищення кваліфікації, навички іншомовного спілкування.

МАССОВІ ВІДКРИТИ ДИСТАНЦІЙНІ КУРСИ КАК СРЕДСТВО РАЗВИТИЯ ПРОФЕССИОНАЛЬНОЙ КОМПЕТЕНТНОСТИ ПОГРАНИЧНИКОВ

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Анализ за последние годы массовые открытые дистанционные курсы (МОДК) вызвали большой интерес как современная технология обучения. В статье рассматривается проблема развития профессиональных компетентностей при повышении квалификации пограничников посредством МОДК. Дифференцированы понятия «мобильное обучение», «дистанционное обучение», «использование информационных технологий». Подготовка к обучению в течение всей жизни особенно важна для пограничников ввиду быстрого развития информационных технологий. Дальнейшее образование помогает им противостоять угрозам национальной безопасности, конфликтам и нестандартным ситуациям в пунктах пропуска через государственную границу и новым методам действий нарушителей по подделке документов, перемещению контрабанды, пересечения государственной границы. Проанализировано применение массовых открытых дистанционных курсов. Целью статьи является анализ применения МОДК для развития профессиональных компетентностей. Каждый МОДК направлен на формирование интегральной компетенции, общих компетенций и профессиональных (специальных) компетенций офицеров пограничной службы. Способность общаться на английском языке является одной из специальных компетентностей пограничников и ключевой компетентностью для того, чтобы осуществлять охрану государственной границы. Рассмотрены особенности разработки МОДК «Проведение контроля второй линии в пунктах пропуска через государственную границу» для подготовки пограничников, которые проходят службу в подразделениях на государственной границе и хотят получить повышение по службе. Эксперимент был проведен в Национальной академии Государственной пограничной службы Украины имени Богдана Хмельницкого и задействовал 276 пограничников. Анализ результатов дистанционного курса свидетельствует об эффективности разработанного учебного курса. Обобщение обратной связи от участников программы также свидетельствует об увеличении мотивации пограничников к развитию личных профессиональных навыков, особенно навыков общения на иностранном языке.

Ключевые слова: массовые открытые дистанционные курсы (МОДК); мобильное обучение; дистанционное обучение; пограничники; повышение квалификации, навыки иностранного общения.