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THE ANALYSIS OF INNOVATIVE EDUCATIONAL TECHNOLOGIES' DEVELOPMENT IN TRAINING OF CUSTOMS BUSINESS SPECIALISTS IN THE EURASIAN ECONOMIC COMMUNITY COUNTRIES

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Abstract

The article is devoted to research of innovative educational technologies' application in the sphere of customs education in the customs union of the Eurasian economic community countries. Complication, integration processes, increase of information flows demand customs authorities' human resources quality improvement.

Keywords: Innovative Educational Technologies, Information Technology, Professional Education, Training of Customs Business Specialists, Educational Factors and Models.

Introduction

The customs service occupies one of the central places in regulation of foreign trade activities and maintenance of the state economic safety. Performance of these tasks directly depends on quality and level of vocational training of customs authorities' specialists. Globalization of the world trade and development of its regulator system, modern integration and customs services' modernization demand good practice of customs officers' training and retraining.

Customs business specialists should be adaptable to constant changes of regulatory and legal framework, introduction of modern information customs technologies and the increased complexity of customs infrastructure. Volume and complexity of information increase avalanche and demand the person to update his knowledge operatively, to be adaptable to constantly changing information environment. In other words, in the modern world the successful and demanded professional should possess the personal qualities: firstly, making decision quickly and correctly; secondly, being adaptable to new conditions, i.e. to be mobile person ¹⁴. The major component of formation of highly

¹⁴ B. M. Igoshev System-integrative organization of professionally mobile trainers training: thesis/ Igoshev; the Ural state pedagogical university. – M, 2008. – pp. 3-5.



skilled mobile human resources is the created and constantly improved continuous professional customs officers training system ¹⁵.

Increasing demands for a level of customs specialists training leads to operative introduction of the modern results-oriented technologies in educational process. It should be noted that development of educational technologies is based on psychology, sociology, pedagogic, computer science achievements and other sciences achievements i.e. they «accumulates» innovative potential of these sciences. The technological approach in training becomes the leading in solving problem of necessary quality assurance of education. The technology of training synthesizes all resources and organizational characteristics of system. They show as property of certain education quality and quality management of educational system. Thus, the urgency of problems and tendencies of development innovative educational technologies in customs sphere does not raise the doubts. The article is one of the results of scientific research, which was conducted within the framework of the confirmed research work on the theme: «The research of educational management development in the customs sphere based on using of interactive educational technologies» (supervisor, professor. Alexander Ershov, St. Petersburg branch of the Russian Customs Academy).

The analysis of existing publications shows that this problem isn't considered in the field of customs business practically. Some available separate articles don't have systematic understanding of its solving. There aren't research works and special literature.

The urgent need of this problem solving determined the importance of this research, defined its theme, object, subject and purpose. The object of this research is customs staff training system in the Customs union of the Eurasian economic community (EurAsEc). The subject is the innovative educational technologies in the field of customs staff training at the present stage.

The purpose of this article is research of using of innovative educational technologies in the field of customs staff training in the Customs union of the Eurasian economic community (EurAsEc).

During the research time frame was determined (from 1991 to 2012) and forecast of educational technologies development was determined to 2020. The first time border is 1991. It is a period of the sovereign independent countries (former USSR republics) customs services' establishment. The final border of research is caused by the launch of the Single economic space of the Customs union countries (Russia, Belarus and Kazakhstan).

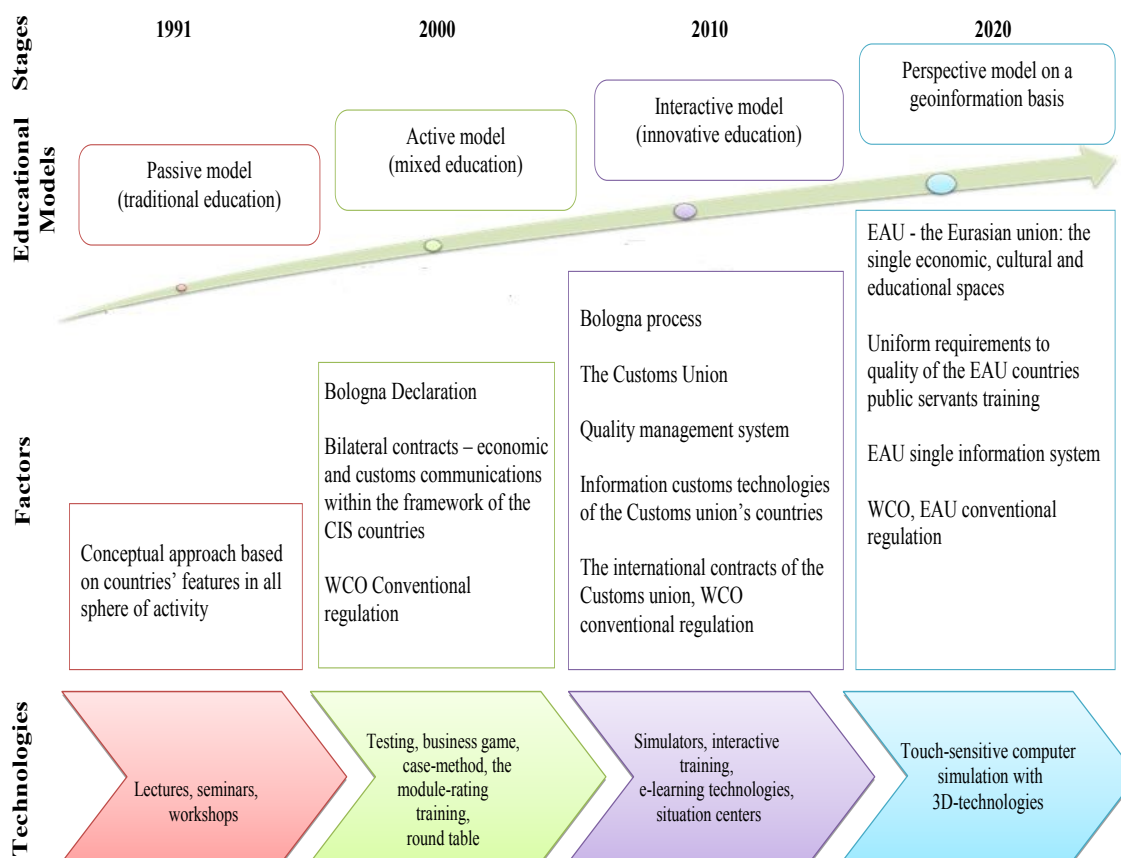
It's necessary to consider the evolution process of the customs business specialists training system in conjunction with the formation of educational models and factors which have influence on customs business' development of Customs union EurAsEc customs services. There is the model of the modern customs education evolution in the figure 1.

During the period from 1991 to 2010, there were large-scale changes in spatial characteristics of Russian, Belarusian and Kazakh customs services. For example, there were 8 regional customs departments, 4 specialized regional customs departments, 102 customs, 566 customs posts, 8 agencies which are administered by the Russian Federal

¹⁵ Strategy of the Russian Federal customs service (FCS) up to 2020, was confirmed by the Decision of the Russian FCS board on June, 26, 2009.

Customs Service (FCS), 10 Russian FCS representative offices abroad in the Russian customs authorities system in 2010. During the analyzed period the staff of the Customs union services increased repeatedly to ensure the economic safety of the sovereign states and to promote trade. For example, there is the dynamics of customs officers increase in Russia: January, 1992 – 8 thousand people; January 2010 - 68 thousand people ¹⁶. During the analyzed period the basic method was both mass and a wave-like set of different profiles specialists. The system problem was low professional level of staff. That problem was objective because customs departments couldn't train necessary number of highly skilled specialists for so short term. Training was conducted on workplaces with the assistance of coaching institute. That stage was associated with passive model, i.e. listener (student) played the role of “object” of training (listen and look). The main form of the customs staff initial training was the traditional lectures and seminar system.

Figure1: Evolutionary model of the modern customs education development within the frameworks of the Customs union



¹⁶ The Russian Federal customs service, see also: <http://www.customs.ru>.



Generally, in the EurAsEc countries the traditional education was based on «teaching» approach and directed to memorizing information, giving maximum of theoretical knowledge and a minimum of competence and practical skills. In the transition to the market economy the crisis was showed in discrepancy of specialists training content to changing environmental conditions, first of all, to new employers' requirements. The important component of this discrepancy was lack of the majority people training in the foreign trade activities to work in changing information-professional conditions. The general lack was a tendency of “the differentiated subject executors” training - specialists in the standard conditions of command-administrative economy.

The reality of the market relations demands training of professionals, who can adapt their knowledge to the contingency social and economic processes management creatively and practice their competence¹⁷. Need for reform of customs education system was also caused by the discrepancy of old educational models to the new training possibilities which were result of information-communication technologies development, appearance of a global computer network the Internet, integration in educational processes.

The following stage of customs education development within the framework of the Customs union is related to the active model formation based on the mixed training - traditional and computer technologies. In the 2000s development of the customs specialists training system in the Customs union countries is related to the world processes of the higher education reforming: 1) beginning of the Bologna Process; 2) new training methodology (“Learning” approach). This stage is characterized with the active training model in which the student is a "subject" of training (independent creative work).

In the Eurasian economic community countries the idea of specialists training is strongly related to the improvement of the professional training quality which is oriented the international standards. Development and acceleration of the foreign trade due to the modern information technology and effective management procedures introduction demand improving the quality of customs business specialists training. Transition to the modern requirements and high technologies is impossible without the effective using of the personal potential possibilities.

The measure of the individual intelligence quality is the ability to make professional decisions under partial and full uncertainty. Personal development is the main component of the modern education. The concept of progress as a special type of the personal development has integral character and is adapted to innovations, concerning the integrated educational activities. So it's impossible to talk about the trends of the educational system innovative development based on only the changes of quantitative factors. According to the system approach, innovations should be related to the quantitative and qualitative parameters which have influence on the procedural side of education development, increase the degree of its integrity and adaptation to the environment, and provide the demanded potential for the further development.

During the research it was identified that development and practical application of

¹⁷ M. B. Alekseeva System management of the educational economy (theoretical bases and methodology): thesis / M.V. Alekseeva; the St.-Petersburg state engineering-economic academy. – St.-Petersburg, 1998. – p. 36.

the innovative technologies in the educational sphere should be conducted in parallel with the analysis of the effectiveness of these innovations introduction. It's clear from the figure1 that the number of factors which have influence on the development of the professional customs education increased in the analyzing period considerably. There was the transition from the short-term courses to the continuing education. The number of directions and levels of training increased. For example, there was one level of training; set of three specialties was implemented at the Russian Customs Academy in 1994. In 2011 two-level system of training was formed (a bachelor - a magistracy), specialty is preserved; the number of training direction was doubled at the Russian Customs Academy.

Nowadays, one of the most important requirements to the modern specialist is the knowledge of traditional and innovative technologies of customs control and customs clearance. Young specialists should be successful in integration into the work activity. Not only national authorities but also international organizations make their demands to the quality of customs business specialists' training. Nowadays quality of the higher education is defined the position of quality management system which based on ISO standards. Quality of the higher customs education is assessed from the perspective of SAFE (WCO, 2005), the international and bilateral agreements in the customs sphere.

To implement these requirements, using of an interactive training model was the most effective. The term «interactive training» is training based on active interaction with the subject of training (the teacher, the head, and the trainer). The information should be acquired in active-creative model not in a passive model. Using of interactive model in training includes modeling of practical situations, using of role-playing games, fast joint problem-solving, application of trainings and simulators. The types of technologies which are used for customs officers training and retraining in the Customs union countries are presented on the figure 2.

Figure 2: Modern educational technologies in professional training system in countries of the Customs Union





Nowadays, many educational technologies are used for customs specialists training and retraining. E-Learning technologies and simulators are recognized the most promising. E-Learning technologies are the technologies which are based on the application of information and telecommunication technologies with the mediated (on distance) or not completely mediated interaction between trainee and trainer¹⁸. E-Learning system is effective in the conditions of a mass professional training. It is an instrument of the solution of problems in professional training and retraining of customs officers. E-Learning process isn't limited by time frameworks, multimedia technologies are used in it, and mailing of teaching materials is made as compared with the traditional training models.

Specialized systems, for example, Moodle, Prometheus, are used to realize this technology in the Customs Union countries. Virtual learning environment Moodle has been used in the St.-Petersburg branch of the Russian Customs Academy since 2009. This software product is constructed according to the modern standards of information training systems. It gives the opportunity to realize all mechanisms of communication between trainee and trainer: perceptual (is responsible for perceptions of each other), interactive (is responsible for organization of interaction) and communicative (is responsible for exchange of information).

The virtual learning environment is the optimum organizational form for realization of information accessibility in education; it is the basic resource of mobility. Professional mobility is a dynamic quality of the person which causes its successful adaptation to changing conditions of professional activities, ability to learn innovations, being ready for self-improvement, self-development and self-realization in professional activities¹⁹.

Simulators are the necessary element of the effective training and formation of students' competence. They are software and hardware product of training or practical skills' development. Simulators are widely used in many spheres of activity. In customs business they are used to acquire skills in working in customs software tools on-line, and with the customs and foreign trade documentation, regulatory and legal framework.

For example, in 2011 a multiinteractive simulator on training of people who serve the international train «Allegro» Russia-Finland was developed and approved within the framework of the initiative research work “Working out of the methodical recommendations for improvement of organization of the high-speed passenger railway communications Russia-Finland’ customs clearance and customs control” (supervisor professor Alexander Ershov) in the St.-Petersburg branch of the Russian Customs Academy. This simulator allows model various situations close to the practice which the customs inspector can face to and train to make fast and correct decisions at application of new innovative customs technologies. The purpose of the multi-interactive simulator introduction is obtaining skills in administrative decision-making in the system of specialists training and retraining who serve the international high-speed passenger trains,

¹⁸ The order of the Russian Federation Ministry of Education and Science of May, 06, 2005 № 137 “About E-Learning using”.

¹⁹ B. M. Igoshev System-integrative organization of professionally mobile trainers training: thesis/ Igoshev; the Ural state pedagogical university. – M, 2008. – pp. 14-16.

and also for training of undergraduates on a specialty “Management of customs service”.

Introduction and using of the innovative interactive educational technologies will allow reach a new level in customs specialists’ training. The category «new quality» means change in representations of educational process subjects about educational conditions, processes and results. It is treated as achievement of the educational system state which provides forming of students’ abilities:

- to study throughout all life ;
- to think and operate in various situations independently;
- to solve daily life and professional problems, using the acquired subject, intellectual and general knowledge and skills.

As a result of this research stable growth of students was identified in the Russian Customs Academy: from 29 students in 1994 to 9339 persons in 2010. 18257 persons (in 2009 – 16 169) were retrained on programs of professional skills improvement. The Russian Customs Academy is the head high school of the learning-methodical association on customs education which consists of 79 high schools of the Russian Federation.

When the Customs code of the Customs union entered into force, more than 45 thousand Russian customs officers were trained.

In 2010 14392 Russian customs officers were trained and retrained in the Russian Customs Academy. 5175 persons were trained at the Institute of E-Learning, retraining and professional skills improvement, 939 persons were trained at the law-enforcement Institute, 8278 persons were trained at the faculties of professional skills improvement in the branches of the Russian Customs Academy. The total number of the customs officers who were trained and retrained at the Russian Customs Academy exceeded the level of 2009 at 18,4 %²⁰.

This trend will continue until 2020 because it is expected strengthening of the integration processes in the educational sphere. It will be necessary to use e-self-organizing systems with having obligatory feedback to provide academic mobility of many students within the framework of the Union States.

Such promising model will be based on the GIS technologies with using of 3D-models. That’s why it is necessary to apply the new educational technologies based on touching computer models and on-line 3D-technologies during specialists training. Probably, there will be new educational technologies based on nanotechnologies in the future. It will allow developing necessary skills of students and to continue develop of creative qualities.

Summary and concluding remarks

In conclusion it is necessary to note that special attention is paid to improving the quality of customs officers training in the context of integration processes and developments of the Customs union countries’ customs authorities up to 2020. Level and quality of training should meet the requirements of employers, the international standards. Increasing demands to the quality of the specialists’ professional training should be

²⁰ The Russian Federal customs service, see also: <http://www.customs.ru>



accompanied with the introduction of the innovative technologies to the educational process. The analysis of the development evolutionary model of customs education showed the transition from the passive model based on the using of traditional technology to the perspective model based on modern achievements of science, techniques and technology. Thus, it is necessary to provide such single system of the professional training which will allow prepare the creative specialists which have a wide range of knowledge, skills, potential of self-development throughout all life.

Endnotes

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