В.А. Липатов

Российский экономический университет имени Г.В. Плеханова,
Москва, Россия

Предоставление образовательной услуги с использованием дистанционных технологий для лиц с ограниченными возможностями здоровья (на примере штата Аляска и Северных регионов РФ)

Дистанционное образование способствует решению образовательных проблем лиц с ограниченными возможностями здоровья. Крайне важно изучение зарубежного опыта. Североамериканские университеты накопили большой опыт в данной сфере. Blackboard является ведущим пакетом программного обеспечения, который в отличие от собственных програмных продуктов и асинхронных курсов, созданных многими российскими институтами, профессионально помогает решить образовательные проблемы лиц с ограниченными возможностями здоровья. В международном Университете Арктики растет интерес к использованию информационно-коммуникационных технологий и открытых учебных ресурсов, и сетей. В 2008 году тематическая сеть Университета Арктики по дистанционному обучению и электронному обучению начала функционировать. Интернет и дистанционное обучение создает новую возможность для лиц с ограниченными возможностями здоровья.

Главная цель: Способствует ли дистанционное обучение на Аляске и в Северных и сибирских регионах Российской Федерации решению образовательных проблем околополярного Севера для лиц с ограниченными возможностями здоровья.

Основные задачи исследования: выявить современные образовательные арктические проблемы для лиц с ограниченными возможностями здоровья; проанализировать специфику дистанционного образования; проанализировать вопрос дистанционного обучения циркумполярного Севера; проанализировать вклад дистанционного обучения в более широкие проблемы арктической политики и управления.

Актуальность работы: Арктический отчет о развитии человека в Арктике указывает, что существует очень мало околополюсных исследований в области образования, в том числе для лиц с ограниченными возможностями здоровья. Эта статья может начать первоначальное обсуждение темы, которое может быть дополнительно изучено в будущих работах.

Новой тенденцией для приполярного образования является его растущая доступность. Доступность для студентов означает способность ходить на занятия и реализовать свой потенциал, то есть, наличие возможности для посещения школы, как физически, так и культурно. Расширение доступности образования характерно не только для Севера. Скорее, это является отражением изменений, которые произошли в урбанизированных районах по всему миру, где рост населения, увеличение уровня жизни, современные технологии были преобразовывали образование на протяжении последних пятидесяти лет (Арктический доклад о развитии человека I).

Основа исследований состоит из научно-исследовательских работ и конференций по дистанционному обучению для лиц с ограниченными возможностями здоровья в Арктике; законодательных актов, созданных международными организациями, американскими и российскими ведомствами; сайтов с информацией о российских и американских университетах. Были также использованы международное, российское и американское законодательство, статистические источники, средства массовой информации, касающиеся образовательной политики для лиц с ограниченными возможностями здоровья.

Ключевые слова: лица с ограниченными возможностями здоровья, дистанционное образование, модель предоставления образовательной услуги, Россия, США, штат Аляска.

Viacheslav A. Lipatov

Plekhanov Russian University of Economics, Moscow, Russia

Provision of educational service with the use of distance technologies for disabled persons (case study: the state of Alaska and Nothern regions of the Russian Federation)

The distance education contributes to the solution of educational problems of disabled persons. The study of foreign experience is extremely important. North American universities saved up a wide experience in this sphere. Unlike self-made software products created by many Russian universities, Blackboard is the leading educational software package that professionally helps to solve educational problems of disabled persons. The international University of the Arctic has a growing interest in the use of information communication technologies and open educational resources and networks. In 2008 the subject network of University of the Arctic on distance education and e-learning began to function. The Internet and distance learning creates a new opportunity for disabled persons.

Main goal: Whether distance education on Alaska and in Northern and Siberian regions of the Russian Federation promotes the solution of educational problems of the North for disabled persons.

Main research problems: to reveal modern educational Arctic problems for disabled persons; to analyse specifics of remote education; to analyse a question of distance training of the circumpolar North; to carry out the comparative analysis of distance training on Alaska and in Russian northern and the Siberian regions; to analyse a contribution of distance training to wider problems of the Arctic policy and management.

Relevance of work: The Arctic Human Development Report I specifies that there are very few circumpolar researches in the field of education,

1. Introduction

Education is an essential component of the human life. However, there are a lot of problems for disabled person education. Today, many American universities create special services for them. For example, disability services of the University of Alaska Fairbanks provides academic accommodations to UAF students who experience a disability. They welcome individuality and work with students attending Tanana Valley, Bristol Bay, Northwest, Chuckchi, Kuskokwim, Interior Aleutians, and Distance Education campuses. Disability Services operates an Assistive Technology Lab and produces materials in alternate formats. Arrangements can be made for American Sign Language interpreters, transcription services, braille and audio formats.

There are existing post-secondary institutions in the Arctic that either by campus or program location and/or through adapted delivery systems try to improve accessibility including to the disabled persons. The model of the University of Arctic allows for a dynamic development of shared education systems through mutual cooperation. This network can be a very efficient tool for delivering a relevant curriculum for a changing North (Kullerud 2009).

So, education is a major factor for sustainable development in the circumpolar region. Regionalization, small populations in remote communities and few urban centers, cultural diversity and the erosion of small languages are certain common characteristics in northern education. The University of the Arctic will help to increase accessibility to higher education and research in the Circumpolar North with the help of online learning technologies.

2. Distance Higher Education in the Circumpolar North

The practice of Arctic countries confirms the effectiveness of online or distance education including disabled persons. Taking into account the Arctic Social Indicators (2010, 76), Statistics Iceland has examined the drop-out rate of students in tertiary education by comparing the Statistics Iceland Student Register with the Register of Examinations. The results show that from autumn 2002 to autumn 2003 a total of 2,037 students dropped out of school or took a temporary leave from their studies, resulting in a drop-out rate of 14.7%. The rate was lower among students in day courses and distance learning and higher among students in evening courses. In addition, the drop-out rate was lower among students in full-time study and higher among students in part-time study. So, distance learning in Iceland is more effective than evening courses and, probably, than part-time study.

A significant development in northern higher education is the increased interest in the use of information and communication technology and open learning recourses and networks. This is reflected in the University of the Arctic and the Northern Research Forum. Their efforts to raise awareness of natural and cultural circumstance of the Arctic and promoting dialogue among members of the research community and a wide range of other stakeholders in the Arctic have been applauded by the Arctic education ministers (AHDR I).

The UArctic Thematic Network on Distance Education and E-learning was started in 2008 with funding received from the Norwegian Ministry of Education and Research. The University of Tromsø Department of Education is the lead and the host institution in the network, with partners from Nordic countries, and along with from Russia, and Canada. The aim of the Thematic Network is to exchange knowledge and research about E-learning, and a discussion of methodology of the field. It will focuses on the learning processes, pedagogy, and appropriate information technologies necessary to deliver content to and support distant learners.

The Thematic Network main activities can be described as share experience from E-learning with members of the Network, identify the relevant challenges and problems in the field of E-learning in the Arctic countries, facilitate student and teacher exchange, facilitate collaborative research projects, conferences, and publications in the area of E-learning, send applications for funding the network and activities within the network education (The official website of the Thematic Network on Distance Education and E-learning).

Distance technologies are used in other networks of the University of the Arctic including for disabled persons. For example, more than 40 scientists and students from universities of the U.S., Canada, Finland, Germany, Norway and the leading Russian universities - members of the consortium of the University of the Arctic - took part in the Natural Hazards workshop which ended in Northern (Arctic) Federal University (NarFU), Arkhangelsk, on the 22 of March 2014. The workshop was the first major activity of the newly formed Natural Hazards Thematic Network of UArctic. The goal of the workshop was to begin development of an online course for UArctic in natural hazards that can be used for the disabled persons. Construction of the course itself is expected to take about a year.

The workshop organized in Arkhangelsk by University of Alaska Fairbanks (UAF) and NarFU is unique. Its particular features are: (1) leading roles in design and implementation of the course is given to students; (2) multi-national and multi-disciplinary knowledge and perspectives on most common natural hazards, as well as their social and policy implications, are included into the course; and (3) an emphasis is on problems that are unique to or exacerbated by Arctic conditions. The latter includes presence of ice, limited transportation infrastructure, great length of supply lines, and the time pressure for response that extreme cold imposes.

The main outcome of the event was development of the concept of the on-line course «Natural Hazards». In March 2014, the participants discussed the preliminary results. Student made a presentation on thematic modules of the course: Earthquakes, Tsunami, Forest Fire, Flood, and Volcano. Students confessed that it is very difficult to include all interesting information in a small educational program, so the modules will include only the most basic issues.

The distance course will be based on lectures. However, practical exercises, particularly the method of case studies will be also included. The joint educational course will be designed for MA and PhD students of UArctic. Participants will continue further work over the course during spring and summer of this year. In September 2014, the group plans to discuss the course modules in Alaska (The official website of the Thematic Networks on Natural Hazards).

Individual universities of the continuum will offer the distance course on the natural hazards using the same content, but their individual delivery and learning management systems. For example, the Moscow State University of Economics, Statistics and Informatics (MESI) and its northern branches will use a self-made learning management system Virtual campus.

Using a system of electronic training of MESI, in the 2014 spring semester the author developed a module "Image of Natural Disasters in the French and Russian Literature" for graduate disabled students of "Theory of mass communications and international public relations". The module was organized as a blended course combining elements of traditional and electronic models of education.

The MESI traditional model means internal communication with educators, lessons in a class, etc. The electronic model entails training with the use of information technologies: use of Internet resources, communication with educators in forums, viewing of training materials via online, passing tests via the computer, etc.

For authorization on the site of the Virtual Campus, it is necessary to specify a login and password. At the beginning of a semester each student receives an individual login and password for the login. This information is strictly confidential and isn't subject to disclosure. As the Virtual Campus is realized on the Microsoft Share point 2010 platform, only the MS Internet Explorer browser can work correctly in the system. Students are given assignments, appointed electronic training events, for example, tests, electronic textbooks, tasks, forums etc.

One of the assignments for the course is a 3-5 page essay on the theme "The image of natural disasters in the literature". The following literature works could be used: 1) Gorodetsky S. M. "I love you one", 2) Voltaire "Candide", and 3) Heinrich von Kleist "The Earthquake in Chile".

Materials of the module and results of the educational process will be used for a Social Sciences module of the University of the Arctic online course "Natural Hazards in the Arctic".

This blended course was effective as other programs aimed at extramural and part-time (evening) students. The results of tests and assignments in the Virtual campus really showed the students' abilities. Full-time students at the Bachelor level will probably not be so productive on this course based on the experience the author has faced educating within other disciplines.

Thus, distance education in the Arctic can be effective. The University of the Arctic and the Northern Research Forum tend to increase the use of information and communication technology and open learning recourses and networks. In 2008 the UArctic Thematic Network on Distance Education and E-learning started its activity.

3 Distance Education in the State of Alaska

Alaska universities offer different online courses. For example, the University of Alaska Fairbanks eLearning & Distance Education (UAF eLearning & Distance Education) has the longest standing distance delivery program offering correspondence courses for more than twenty-five years. It offers hundreds of courses every year, including required courses for various degree programs. It also offers online instruction and degree programs. The University's online degree programs provide working professionals and full-time students with flexibility, course engagement, and interaction with internationally renowned faculty. Students enrolled in online degree programs can attend courses at anytime from anywhere (The official website of the University of Alaska Fairbanks eLearning & Distance Education).

Taking into consideration remoteness, it is important to say that infrastructure plays a crucial role for the Alaskan secondary education. In the state there are communities, which are accessible only by air, and of those connected by road, some are only connected by winter road for four months of the year. Populations in the different communities vary, sometimes on the order of tens or hundreds. So, it is difficult for small communities to have the same quality of education as large communities (AHDR I, 170-171)

Alaska faces a secondary teacher shortage. The shortage is geographically specific. That is, shortages occur only in some schools and some communities. In Alaska, the majority of the schools facing shortages are in rural communities off the road system. These schools, year in and year out, have difficulty attracting and retaining teachers. In fact, the 18 school districts with the highest turnover rates in the state-that is, rates averaging 20 percent annually over the period

1996-2000-are all, with one exception, remote rural districts (McDiarmid 2002). The primary goal of Rural Education Preparation Partnerships (REPP) is to increase the number of teachers in rural school districts who are either Alaska Native or who have lived in rural Alaska for an extended period. Within this goal, the program has an objective to create a group of learners among REPP interns by using the LMS Blackboard tools - a teleconference and threaded discussion group.

REPP interns and their faculty are scattered across Alaska, and may see each other only a few times during their program. This can lead to interns feeling isolated and unsupported as they try to balance the academic demands of the program with those of being in the classroom each day. REPP attempts to address this problem by holding meetings for interns periodically and by using technology to support continuing communication, even when participants are geographically separated. For many, their internship year begins with the fall meeting with other interns as well as mentors and REPP personnel. This gives interns an opportunity to initiate personal relationships that can be continued at a distance. During the year, they communicate periodically via teleconference and in threaded discussion groups in their distance education class. This class is delivered via Blackboard (Rural Educator Preparation Partnerships: Partnering to Success 2003)

Teaching of Native Alaskan languages are also developing through distance education tools. For example, an open learning network of Tlingit language is dedicated to the speakers, teachers, and students of the language. The network introduces teaching methods with playing games in Tlingit. Classes of the Intermediate Tlingit can be viewed through YouTube. The website represents video introductions to the sounds in Tlingit and to sounds using words (The website of Tlingit language).

To sum up, both Alaskan universities and secondary schools extensively use distance education to deliver courses and support educators, in particularly, in Alaskan remote and small

rural communities where. The LMS Blackboard with its tools including threaded discussions dominates. The Native people education plays an important role. Open learning networks of Native Alaskan languages create opportunities for everybody interested in them.

4. Distance education in the northern regions of the Russian Federation

Alaska is the only Arctic state in the United States. In Russia there are has more than 25 regions in the North and Siberia, as well as a great number of universities. Only the Northern Economic Region (the European North) has twenty universities.

The education in Russian rural and remote areas of the North has a lot of problems. It may be that to many inhabitants of the Russian Federation, especially in the rural parts, the idea of having access to the Internet seems rather unreal, or utopian. At present, for many people in Russia Internet access is simply not feasible. Computers are restricted to urban areas and, moreover, considerably less than in North America, Western Europe and Japan. The telephone system in many rural areas is not reliable or not automated at all. This is an even more crucial point in the remote areas of the Far North. Electric power supply is an additional problem: in small settlements it is provided by diesel generators, it is restricted sometimes to one or only half an hour daily, power failure occurs quite often (about once a week), and sometimes it lasts for several hours. Under these conditions one cannot rely on photocopiers and fax, let alone computers. It is obvious that the local inhabitants must tackle problems, which are by far more elementary than the use of computers or the access to Internet (Habeck 1998).

However, due to the remoteness of schools in northern Russia, new information technologies and distance education are becoming increasingly attractive options. Not all northern schools are uniformly well equipped with computers and software. In the Sakha Republic as of 2003, both village schools and town schools had one computer per 23 students, while

in Russia as a whole the average was one computer per 500 students. Most comprehensive schools use local networks, and all secondary schools have Internet access (AHDR I, 172).

One of the possible ways of solving this problem is the establishment of new universities and branches. New outreach programs on the part of metropolitan universities in Moscow and St. Petersburg stimulate the expansion of high education in the North (Vasiliev 2002, 155-157). These university branches in the North and Siberia can increase investments on infrastructure, maintenance and equipment. The uniform university standard on information technologies and IT program services helps branches to use modern technologies in the educational process.

For example, the Moscow State University of Economics, Statistics and Informatics (MESI) is the Russian first electronic distributed university. Along with its Moscow campus, MESI comprises 13 branches and about 200 study centers all over Russia (from Kaliningrad to Vladivostok) and abroad (Armenia, Belarus, Israel, Kazakhstan, Latvia, Ukraine and Uzbekistan). MESI has campuses in Northern and Siberian regions: in Buryat, Kemerovo, Perm, Krasnoyarsk, Khakassia and Altai.

All regional divisions are connected by a uniform corporate network and realize educational programs on the basis of uniform information educational environment with the use of uniform content, library resources, faculty and uniform management. MESI regional campuses use uniform university standards on information technologies and corresponding program services. Branches have an access to all resources of the head higher education institution in Moscow and «mirror» copies of its technological infrastructure. Each student, regardless of his place of resident, has access to all educational resources of university that allows guaranteeing the highest quality of training in all regional structures of MESI (The official website of MESI). For example, a syllabus for a hybrid interdisciplinary course "Interest Groups and Lobbying in the United States" which content is partly described in a MESI

publication (Lipatov 2013).

Unfortunately, MESI as other Russian universities uses a self-made learning management system and teach asynchronous courses via on-line. It limits distance education effectiveness and does not allow teachers, college and university instructors and educators to use the latest and greatest technology to promote collaboration, as well as assess and improve performance.

Many Russian northern universities using the e-learning environment are facing a motivation problem. For instance, North-Eastern Federal University, previously known as Yakutsk State University, has created a lot of digital training materials, but educators in the learning process not widely and effectively use these materials. There are many reasons for this: no access to the Internet … lack of compensation for creating media (Zamorshchikova 2011).

MESI has successfully resolved this traditional problem. A multilevel wage system encourages professors who teach hybrid courses using the e-learning environment by creating course website, engaging students in social learning, weaving multimedia into class content, assessing performance and managing grades, and sharing open education resources. These educators have an additional pay per hour.

Higher education in the northern and Siberian regions of Russia needs indigenous language training. One of the positive aspects after the collapse of the USSR is the fact that the number of languages taught in Russian schools doubled between 1991 and 1995. In 1987 students could be educated through grade 10 in four languages other than Russian (Georgian, Bashkir, Armenian, and Tatar). Five years later Russian students could be educated through compulsory education in nine languages (add Buriat, Urdmurt, Chuvash and Iakut). In the middle of 1990s additional 87 languages constituted the part of the curriculum. In some instances, non-Russian languages are used in schools where Russian speakers are in the minority. This adds a different dimension to the question of protecting 'minority' rights (Heyneman 1998, 28-29).

In the conclusion, compare to the USA, Russia has more than 25 regions in the North and Siberia, as well as a great number of universities. The IT infrastructure in the North higher education is below the average Russian standards but the usage of modern developments of new information technologies and distance learning are growing. Self-made learning management systems and asynchronous courses dominate in Russian universities. Open educational resources are very popular. Indigenous language distance education is increasing its importance.

5. Conclusion

In conclusion, distance learning in the Circumpolar North is extremely important for solving the educational problems of disabled persons in Alaska and the northern regions of the Russian Federation:

* Unfortunately, learning alone can be harmful for disabled persons, because they feel themselves alone, become antisocial and it will be much harder for them to stick into society. Technological progress will soon allow people learn using virtual reality and it can solve many problems, which disabled people suffer.

* Distance education can be a major factor for development education for disabled persons in the Arctic. The University of the Arctic is creating the Thematic Network on Distance Education and E-learning and the online course of the Thematic Networks on Natural Hazards;

* US Arctic higher education institutions and schools greatly employ distance tools to distribute and support professors and teachers in poorly accessible and rural regions. The LMS Blackboard prevails in professional educational software. Open learning resources for Native people languages simplify access to everybody who is interested;

* There are a lot of distinguishing characteristics in the Russian distance education contrast to Alaska. A great number of universities in many Northern and Siberian regions tend to develop information technologies and distance learning technologies. The level of information technologies for education in the Russian North is lower than in other regions but distance learning and open resources for education are becoming more popular. Self-made learning management systems and asynchronous courses dominate. The online learning tool usage for disabled persons is increasing.

Литература

1. Арктический доклад о развитии человека I. 2004 года. Акюрейри: Стефанссона Арктический институт.

2. Брокс, Х. 2009. Создание учебной среды с веб 2.0: Использование блогов и вики в обучении. Семинар в Мурманске.

3. Научно-обоснованная методика обучения в нтернете: Мета-анализ и обзор обучения в режиме онлайн исследований . 2009 года.

4. Международный опрос по образованию для взрослого коренного населения. Страна исследования: Россия. 2000 год. Институт ЮНЕСКО по образованию.

5. Куллеруд, Ларс. 2009. Образование, направленное на устойчивое развитие Арктики как региона. Издательство ЮНЕСКО.

References

1. AHDR I (Arctic Human Development Report I). 2004. Akureyri: Stefansson Arctic Institute.

2. Brox, H. 2009. Creating learning environments with Web 2.0: Using blogs and wikis in teaching. Seminar in Murmansk.

3. Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies. 2009.

4. International survey on adult education for indigenous peoples. Country study: Russia. 2000. UNESCO Institute for Education.

5. Kullerud, Lars. 2009. Education for the Arctic Sustainable Development. Unesco Publishing.

6. Маршалл, Брин. 2010 года. Основы дистанционного обучения.

7. Махнегар, Фаршад. Июнь 2012. Система управления обучением // Международный журнал бизнеса и социальных наук. Том 3 № 12.

8. МакДирмид Г.В., Ларсон Э., Хилл А. Декабрь 2002 года. Сохранение квалифицированных учителей на Аляске. Анкоридж: Институт социально-экономических исследований, Университет Аляски Анкоридж.

9. Васильев, Виктор, Тойвонен, Николай. 2002. Высшее образование по всему Циркумполярному Северу. Под редакцией Норда, Дугласа С., Веллера, Джеффри Р.

10. Заморшчикова Лена, Егорова Ольга и Попова Марина. Май, 2011. Международный обзор исследований в открытом и дистанционном обучении. Том 12.4.

6. Marshall, Bryn. 2010. The Basics of Distance Learning.

7. Mahnegar, Farshad. June 2012. Learning Management System // International Journal of Business and Social Science. Vol. 3. No. 12.

8. McDiarmid, G.W., Larson, E., and Hill, A. December 2002. Retaining Quality Teachersfor Alaska. Anchorage: Institute of Social and Economic Research, University of Alaska Anchorage.

9. Vasiliev, Victor, Toivonen, Nicolai. 2002. Hiher Education across the Circumpolar North. Edited by Nord, Douglas C., Weller, Geoffrey R.

10. Zamorshchikova, Lena; Egorova, Olga; and Popova, Marina. May, 2011. International Review of Research in Open and Distance Learning. Vol. 12.4.

Сведения об авторе

***Вячеслав Анатольевич Липатов**, к.п.н., доцент*
Российский экономический университет им. Г.В. Плеханова
Тел.: (499)237 83 31 добавочный 18 06
E-mail: viacheslav.lipatov@fulbrightmail.org
Российский экономический университет им. Г.В. Плеханова, Москва, Россия

Information about the author

***Viacheslav A. Lipatov**, PhD in Political science,*
Associate professor
Plekhanov Russian University of Economics
Tel.: (499) 237 83 31, additional 18 06
E-mail: viacheslav.lipatov@fulbrightmail.org
Plekhanov Russian University of Economics, Moscow, Russia