

Lifelong learning as the way of modern personality development in Russia on the example of higher educational institution of technical and natural-scientific profile

N V Antonova^{1,2}, Zh N Shmeleva³ and N S Kozulina⁴

¹ Honorary Consulate of Mongolia in the Russian Federation (Krasnoyarsk, with jurisdiction Krasnoyarsk Krai), 58, Lenin St., Krasnoyarsk, 660049, Russian Federation

² European Council for Business Education Avenue Louise 65, 1050 Brussels, Belgium

³ FSBEI HE Krasnoyarsk State Agrarian University, 90, Mira Avenue, Krasnoyarsk, 660049, Russian Federation

⁴ Krasnoyarsk research Institute of agriculture, separate division of the Federal state budget scientific institution Federal research center "Krasnoyarsk research center of the Siberian branch of the Russian Academy of Sciences", 66, Svobodny Avenue, Krasnoyarsk, 660041, Russian Federation

E-mail: natan-2007@mail.ru

Abstract. The article shows the role of lifelong learning for the development of individuals, organizations and the state. Any state that is interested in its development gives special attention to the education system, which on the one hand trains personnel capable of moving science and technology forward, on the other hand, the development of science and technology requires more and more highly qualified personnel. The characteristics of the two main stages of the formation of the system of lifelong learning from Jan Amos Komenskiy to UNESCO and modern scientists and teachers are presented. It is noted that, although no country has created a coherent system of lifelong learning yet, universities around the world are working on its formation, based on the UNESCO strategy for 2014-2021. The article considers the experience of Krasnoyarsk state agrarian university, located in Russia, in the development of lifelong learning in an agricultural educational institution. The mission and tasks of the University in the light of the tasks of lifelong learning development, programs implemented at the Institute of Additional Professional Education (IAPE) of the University, and courses held at the Center for international relations and business, as well as other technologies for working with students, faculty and staff to form the desire for lifelong learning are presented.

1. Introduction

Issues of education development arose and developed along with the development of industrial production, changing the attitude of society and the state to the training of qualified personnel able to act in the new conditions of industrial development, since it was the development of industry that served as a stimulus for the development of education. This process of preparation went on continuously, starting with Jan Amos Komenskiy (1618-1648), and the founders of the Bell-Lancaster system, Andrew



Bell (1753-1832) and Joseph Lancaster (1778-1838) [1] to the teachers and scientists of the modern world, until the middle of the twentieth century, when P. Lengrand presented his Concept of lifelong learning.

The proposed Concept considered lifelong learning as an integral process that can ensure the development of the creative potential of a personality, as well as the comprehensive enrichment of his/her spiritual world. At the same time, this Concept emphasized the fact that the implementation of it and obtaining satisfactory results can be implemented only if a person creates comprehensive conditions throughout his/her life (UNESCO Forum, 1965) P. Lengrand defined one of the main principles of lifelong learning, namely, the principle of humanization, which was later supplemented in the research of R. Dave by such principles as that of integrity of education; democratization; individualization; and cross-disciplinary principle, which are particularly relevant at the present time.

Based on the ideas of J. A. Komenskiy, researching the lifelong learning for a number of years and understanding its importance for the development of world civilization, we, conventionally, without underestimating the role of other teachers and scientists, in practice of our activities, have divided the whole period into two phases - the first one - that of Jan Amos Komenskiy as the founder of the ideas of lifelong learning, and the second one - the mid-twentieth century and subsequent years.

The Russian system of lifelong learning, from our point of view, in many aspects is based on the ideas of Jan Amos Komenskiy, who outlined his views and statements about the importance of school in the upbringing and educating the individual in his scientific work "the Great didactics", where the scientist highlighted the fact that the whole human life should be a kind of school and any age is suitable for learning; one should only have to clearly define at what age and what a person is more capable to learn [2].

The government of the Russian Federation, as well as the governments of different countries, implementing UNESCO strategies in the field of lifelong learning, use various technologies and methods, such as creating Internet sites with information about educational opportunities in various administrative divisions; posting information about full-time, part-time, distant education in different languages that are in demand among applicants in this territory; offering services for further education in employment centers and services; encouraging training process using both budgetary and extra-budgetary funds in Russia and abroad; promoting the development of free of charge training in the workplace; offering higher education funding for adults.

All this is connected and done to satisfy the demands of the labor market, so that the requests of enterprises for specialists with interdisciplinary skills are fulfilled. Today, knowledge of a foreign language, in particular English, or IT technologies, significantly increases the opportunity for graduate of higher educational institutions to get a prestigious job in positions related to management, marketing, finance, not only in international or multinational companies, but also in Russian companies associated with joint projects with foreign countries [3]. The choice of the employee is increasingly based on competences like creativity, versatility, ability to adapt quickly to changes and respond to relevant challenges, to make complex decisions based on the analysis of the situation, and willingness to systematically improve their knowledge, skills and abilities acquired during education.

Thus, lifelong learning turns into a valuable tool for the stimulation of industry, agriculture and the whole business community development.

2. Literature review

When talking about lifelong learning, scientists usually refer to the works of Jan Amos Komenskiy and his "Great didactics", which is kept in the history of pedagogy due to the fact that its author, ahead of time, presented to the society the division of life ages and the use of appropriate schools for each of them, through the classification of schools, and defined the fields of training in each of these schools (Chapter XXVII) [2]:

- for infancy - mother's womb;
- for adolescence — folk schools, or native language schools;

- for youth - Latin schools, or gymnasium;
- for mature youth — Academy and travel.

Working in higher education institutions for many years, occupying different positions, the authors of the article have always given special attention to the ideas that characterize the activities of universities in historical retrospect, considering the views of Y.A. Komenskiy in the lifelong learning to be fundamental.

First, it is the idea of the universality of subjects that were chosen in such a way that they included basic knowledge in both science and human wisdom;

Second, the idea that only truly skilled and worthy individuals, who could be entrusted to conduct human affairs in future, were awarded honors at the end of their training;

Third, the idea of personnel and material support for education, namely, the availability of such professors for academic classes who are deeply versed in all the sciences, arts, faculties and languages, as well as the availability of public and well-endowed libraries;

Fourth, the idea of selecting talented applicants, so that in future there would be enough people with knowledge and wisdom;

Fifth - the idea of the need of "school for schools", or pedagogical Institute (Collegium didacticum), to spread knowledge among people, and direct them to new useful discoveries [2].

Although there are numerous studies of lifelong learning, both in Russia and abroad (in the UK, Sweden, Germany, Japan, and the United States), researchers and scientists believe that "no country in the world has yet developed a complete system of lifelong learning" [4], [5] and the process of its formation continues. The structure of multi-level lifelong professional learning, proposed below after V. B. Moiseev and supplemented by the authors with the list of institutions implementing it, assumes its conditional division into the following stages:

- Professional orientation (school, other educational institutions and organizations);
- Primary professional education (educational institutions of primary professional education, educational institutions of secondary professional and higher professional education, if appropriate licenses are available).
- Secondary vocational education (colleges, technical schools, lyceums, other educational institutions and organizations);
- Higher professional education, which involves academic training, the purpose of which is to obtain theoretical knowledge and research, and design skills necessary for future practical activities; at the same time, a need for accreditation of educational programs, by both Russian and foreign accreditation agencies (universities, academies, institutes) is noted here.
- Postgraduate education (academies, institutes, faculties, centers, Autonomous non-profit organizations of additional professional education, state Autonomous institutions of additional professional education, private institutions of additional professional education).

In the UNESCO Medium-term education strategy for 2014-2021, the Concept of lifelong learning occupies one of the main places, because its strategic goal No.1 is the following idea: "Supporting member - states in developing education systems to strengthen quality and inclusive learning for all throughout life" [6].

3. Data and analysis

In Russia, Federal law "On education in the Russian Federation" (№ 273, 29.12.2012) regulates the legal status of all educational organizations and individual entrepreneurs that provide training. The given Federal law implements the constitutional right to education for citizens in the Russian Federation, and protects the interests of individuals, society and the state in the field of education; moreover, article 3, paragraph 8 emphasizes ensuring the right to education throughout life in accordance with the needs of

the individual; the adaptability of the educational system to the level of training, development characteristics, abilities and interests of a person.

Over the past decade, practically all the states in the world have given special attention to the development of primary and secondary education as the basis for forming the deliberate choice of profession that meets the needs for skilled workers in industry, agriculture and service sphere, which, in their turn, are also making increasingly high demand on working professions. In the Russian Federation, in response to these challenges, secondary vocational institutions are now being integrated into the structure of universities, thereby ensuring professional self-determination during the school period, and contributing to the generation of the need for lifelong learning in future.

Krasnoyarsk state agrarian university, for example, implements 6 programs of secondary vocational education in the areas of "Technology of meat and meat products", "Mechanization of agriculture", "Electrification and automation of agriculture", "Beekeeping", "Hunting and animal husbandry", "Economics and accounting".

The new requirement for young workers to constantly improve their knowledge and skills to be competitive in the labor market is made available to the public; interest in them is stimulated through participation of students in the Championships of working professions and in the activities of the Union "Young professionals (WorldSkills Russia)" [7]. Due to them, students from all over Russia compete in the skills of prestigious working specialties, such as turning on numerical control machines, welding technologies, mechatronics, floristics, car body repair works, cooking, carpentry, web design, and hundreds of other competencies. These events attract the most talented young professionals with well-developed flexible skills, which substitute now purely professional hard skills. More and more professions today are associated with the ability to find new solutions or to make the own judgments, without relying on set parameters.

Since 2014 the Union "Young professionals (WorldSkills Russia)" organizes corporate Championships among employees of industrial enterprises. Every year workers who have become the best in the Corporation, compete in the professional skills within the National championship of cross-cutting professions in high-tech industries inviting to participation the best workers from corporations and holdings, such as "Roskosmos", "Rosatom", "Rosneft" and a number of others.

Krasnoyarsk Territory has joined the WorldSkills Russia movement since 2013 and has hosted six regional Championships and the semi-finals of the National Championship in the Siberian Federal District (2016). In 2019, at the National Championship of Russia, the region's team of 38 participants won 21 medals; in 2019, at the 45th WorldSkills championship in Kazan, Krasnoyarsk citizen K. Zheltova, as a member of the national team, won a medal for excellence in the competence "Software solutions for business".

4. Research results

Federal State Budget Educational Institution of Higher Education "Krasnoyarsk state agrarian university" is actively involved in the process of implementing the ideas of lifelong learning in accordance with the UNESCO strategies:

4.1. QMS Requirements to mission and tasks fulfilment

According to the requirements of Quality Management System ISO 9001, European Council for Business Education, and Quality Austria, the University's mission, vision and objectives include the idea of promoting the development of lifelong learning, namely, "creating a multi-level system of lifelong learning for preparing the qualified personnel for the enterprises and organizations in the agro-industrial complex of the region and other sectors of the economy, including self-employed citizens in the region who conduct production activities in the form of farms and personal subsidiary plots".

4.2. Accessibility of lifelong learning information

All the information about the activities of the educational institution is available on the official website of the University, including the pages that help attract applicants and ensure lifelong learning (the quality

management system, training programs, training programs for lifelong learning and the centers that implement them) for every applicant. To attract foreign students and adult trainees there are pages in English, Mongolian and Chinese.

4.3 Additional professional programs for lifelong learning

To ensure lifelong learning of the staff and faculty, along with external applicants, in the period from 2006 to 2015 in the structure of Krasnoyarsk SAU the institution of additional professional education worked. It provided the highly demanded education for students and adults by implementing the following programs on the basis of budget financing (due to the participation in regional and national competitions) and extra-budgetary funds. They were as follows:

- Presidential program for advanced training the engineering personnel "Management of energy saving and energy efficiency improvement at the enterprises (organizations)"
- Professional retraining program "State and municipal a" for the people who hold public positions in the state and municipal bodies, among them state employees, civil employees and elected municipal employees of the Krasnoyarsk territory.
- Professional retraining programs: "Technology of processing animal products"; "Land management and cadasters"; "Technologies of bread, confectionery and pasta"; "Geodesy"; "Techno sphere safety"; "Food technology"; "State and municipal management"; "Economy in profiles"; and others;
- Advanced training courses (for faculty): "Technologies of publication efficiency of the scientist"; "Record keeping in the information system "IC: University PROF"; "Work in the information and educational environment to support the educational process using distant learning technologies (DLT)"; "Internal audit of the quality management system in an educational institution", etc.

4.4. Implementation of the lifelong learning approach

The Administration of Krasnoyarsk SAU comprehensively supports and encourages the faculty to implement lifelong learning for their career growth, and that, in its turn, contributes to the quality of teaching perfection. One of these teachers is Associate Professor of the Department of Business foreign languages, who has been among the top five Associate Professors of the University according to the rating of faculty for several years. This is Zhanna Shmeleva, who combines foreign language skills and knowledge of the theoretical and practical foundations of management, and works in bachelor's and master's programs in technical, natural - science and economic fields of training:

- Krasnoyarsk state agrarian university, "State municipal administration", (additional (to higher) education), Manager (Krasnoyarsk 2012).
- Krasnoyarsk state agrarian university, Professional retraining "State municipal administration", (conducting professional activities in the field of management), Manager-administrator (Krasnoyarsk, 2010).
- Krasnoyarsk state agrarian university, Federal service for supervision of education and science, Associate Professor at the Department of business foreign language (Moscow, 2010)
- Krasnoyarsk state agrarian university, Irkutsk state university, candidate of science in philosophy, (Irkutsk, 2007).
- Krasnoyarsk state pedagogical university, teacher of English and German languages (Krasnoyarsk, 1997) diploma with honors.

4.5 Activity of the Center for international relation and business in the lifelong learning sphere

To organize the international activity of the University and to promote foreign languages as a tool for its organization, the Center for international relations and business was established in 2006 and it exists at the University at present. The Center implemented:

- English language courses : "English for training abroad", "English for working abroad", "My scientific research in English", "Technical aspects of English usage in production field", "English for teachers of professional subjects given in English", "Russian as a foreign language" These courses are conducted for managers and specialists of large, medium and small agricultural enterprises of various forms of ownership; teachers of special disciplines in English; students traveling abroad; businessmen; specialists working with foreign companies; foreign citizens.
- Business courses: "Personnel management", "Motivation", "Corporate social responsibility in agribusiness", "Effective entrepreneurship in the agricultural sector". The courses invite managers and specialists of large, medium and small agricultural enterprises of various forms of ownership; businessmen; specialists working with foreign companies.
- Department of international scientific and technical programs was created at the beginning of 2000th and staffed mainly by the University graduates who studied English in depth at the Institute of International management and education. It was done for them to gain practical experience in the use of English in the profession. The functions of the Department today include the organization of international activities at the University based on Federal legislation and on the Bye-laws of the Ministry of Agriculture, namely: the organization of the University international activities; organization of participation in international programs and projects; professional development of faculty abroad; negotiations and receptions of foreign delegations; recruitment and training the foreign citizens; registration of foreign students and employees in the Federal Migration Service; preparation of reports for all Ministries and organizations. The Department's activities significantly contributed to the accreditation of educational programs in management (bachelor's and master's degrees) at the Institute of International management and education by the European Council for Business Education in 2014. for a period of 3 years; and for a period of 5 years (till 2022) in 2017 [8].

4.6. Cooperation with WorldSkills Russia

Krasnoyarsk SAU actively cooperates with the international organization –the Union "Young professionals (WorldSkills Russia)" and assists it in holding events in the city and region. On November 28th, 2019, the Center for training middle-level specialists of the University took part in the opening ceremony of the "Boiling Point – Krasnoyarsk». It was meetup event "WorldSkills as an event and fate". Speakers at the meeting were certified WorldSkills expert on the competence of Bread making M. V. Arbuzova; international expert V. Popkov; Head of the Development department of the movement "Young professionals (WorldSkills Russia) in Krasnoyarsk E. Shevchuk. The moderator was the writer, videographer A. Starodym.

During 2015-2019, the University provided assistance and support to all events held by WorldSkills Russia on the territory of Krasnoyarsk region.

4.7. Personnel selection on the basis of lifelong learning criterion

In connection with the new requirements for higher educational institutions to conduct international activities, outlined in Federal law "On education in the Russian Federation", in 2014 the Administration of Krasnoyarsk SAU decided to focus its activity on the countries of Asia, and to open a Representative office in Mongolia. The position of Director of the Representative office had to be occupied by a person with cross-disciplinary knowledge, high communication skills, adaptable to modern challenges, and an expert in international decision - making. The criterion for selecting a candidate for the position was readiness for lifelong learning. Such person was found among specialists of the region engaged in

international business. It was Evgeniy A. Kuzmin, who had cross-disciplinary knowledge and required skills, and the following education:

- International academic accreditation and certification committee (IAAC, Moscow, 2012), professional degree: PhD in Business Administration;
- Moscow Academy of state and municipal administration (Moscow, 2011), specialty: public administration and national security;
- Moscow Academy of state and municipal management (Moscow, 2011), specialty: foreign economic activity management;
- Non-governmental higher educational institution: Regional financial and economic institute (Kursk, 2007), specialty: management of organization;
- Krasnoyarsk state technological academy (Krasnoyarsk, 1996), specialty: forest and forest park management.

The correctness of the appointment of Evgeniy A. Kuzmin to the post of Director of the Representative office in Mongolia, based on the readiness and ability to learn throughout the life, is confirmed by his further career growth, namely:

- Representative office of Krasnoyarsk SAU was registered in Ulaanbaatar, Mongolia in 2016. Today it is the only Representative office of educational institutions of the Krasnoyarsk territory in Mongolia. It is responsible for the educational and research activities of Krasnoyarsk SAU in Mongolia.
- Evgeniy A. Kuzmin's successful work in Mongolia was noted by the leadership of Mongolia and in December 2017, he was awarded the diplomatic title Honorary Consul of Mongolia in the Russian Federation (Krasnoyarsk with the jurisdiction of the Krasnoyarsk territory);
- In April 2019, Evgeniy A. Kuzmin also received the diplomatic title of Cultural Envoy of Mongolia to the Russian Federation.

5. Conclusion

Krasnoyarsk state agrarian university is successfully working on the implementation of UNESCO strategies for the development of lifelong learning through the development of its mission, vision and objectives; through earlier professional self-determination of schoolchildren; through the opening of programs of secondary vocational education; through the creation and improvement of institutes and centers of additional professional education; through programs of additional professional education, additional higher education for the faculty and third-party applicants; through implementing foreign language courses for the faculty who gives special subjects in English, graduate students and master's students; through participation in competitions, training seminars and events of WorldSkills Russia; through targeted work on the selection of personnel focused on lifelong learning.

This activity allows the agricultural university to survive in the tough competitive environment on the market of educational services.

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