Modernization of Higher Education in Central Asian Countries: Trends, Problems and Solutions

Eugene S. Anichkin¹, Kseniya E. Kovalenko²

Abstract

This study examines key transformations in the development of higher education in the countries of Central Asia, conditioned by the processes of globalization. The study reveals the general tendencies of the modernization of higher education in Central Asian countries: the restructuring of the university system, the expansion of the mechanisms for assessing and monitoring the activities of higher education institutions, the practical orientation of education, the expansion of the network interaction of higher education institutions and the formation of university associations, the internationalization of educational activity, the virtualization of the educational process. In conclusion, the main problems of cooperation in the formation of the educational landscape of the Central Asian countries are considered and ways of their solution are suggested.

Keywords: Modernization of higher education, Educational trend, Network interaction of universities, Rating of universities, Bologna process, Globalization, Unity and diversity in higher education.

¹ Doctor of Legal Sciences, Associate Professor, Altai State University, Barnaul, Russian Federation. E-mail: rrd231@rambler.ru
² Candidate of Legal Sciences, Associate Professor, Altai State University, Barnaul, Russian Federation. E-mail: kovalenko1288@mail.ru
1. Introduction

The modern educational landscape of the Central Asian countries is marked by a remarkable diversity. This is reflected in the higher education systems of these countries, which have significant quantitative and qualitative differences. So, at present in China there are 2500 universities and branches in which 24 million students are studying. In second place Russia, where the number of universities and branches of 1400 and about 4.5 million students. In Kazakhstan there are 150 universities and affiliates and 800,000 students. Further in decreasing order followed by Mongolia, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan.

2. Changes in higher education systems in Central Asian countries

Such differences show the unequal educational potential of the Central Asian countries, some of which in the last decade have taken leading positions in the global market for educational services. Acknowledgment of the growing level of higher education in Asian countries are university rankings, in which the universities of China and Kazakhstan (for example, QSWorldUniversityRankings) are taking a higher position. In the ranking of QS2015, Chinese universities are represented by Tsinghua University (25th place), Peking University (41st place) and Fudan University (51st place). The Kazakh National University (275th place), the Eurasian National University (371st) and the Kazakh National Technical University (551th place) ranked high from the universities of the Republic of Kazakhstan [1, 2].

To achieve a competitive position in the world market of educational services, they are forced to adapt the Anglo-Saxon criteria for evaluating universities, accepting the fact that the parameters for getting into world rankings are determined by Anglo-Saxon traditions and practices. In this regard, Asian countries pay close attention to international benchmarking, i.e. studying and borrowing the positive experience of foreign, especially European countries.

Currently, there is an increasing influence of global ratings on the development of national policies of states in the field of education, aimed at achieving international standards. In this regard, since the 1990s, Central Asian countries have adopted concepts, laws, programs, projects in the field of education, aimed at enhancing international competitiveness and integration into the global educational space.

So, at present in Russia the basic concepts and laws in the field of education are the Federal Law "On Education in the Russian Federation", the Federal Target Program for the Development of Education for 2016-2020 and "Program 5: 100: 2020". In Kazakhstan, this is the State Program for the Development of Education for 2010-2020, the State Program "Bolashak", and the "Nazarbayev-University" Project. Kyrgyzstan is focused on the national strategy for the development of education for 2012-2020 and the National Action Plan "Education for All". Fundamental acts in the field of education of the Republic of Tajikistan are the National Strategy for the Development of Intellectual Property of the Republic of Tajikistan for 2014-2020 and the Project for the Development of Higher Education in Tajikistan in 2016. In Uzbekistan, the National Program for Personnel Training and the Presidential Program Umid. Sources of legal regulation of educational relations in Turkmenistan are the laws "On Education Reform" (2007) and "On Education" (2013). Mongolia has a "Concept of sustainable development of Mongolia", which includes a section on education. The People's Republic of China is distinguished by a large number of state educational programs, the leading of which are "1000 talents", "Project 211", and "Project 985" [3].

Despite this, the countries of Central Asia (for example, Russia) are modernizing the educational process in accordance with international education standards. The Bologna process serves as an orientation for the Central Asian states in order to enter them into the world educational space. The Bologna Declaration contains six key provisions that are an indicator of accession (or non-alignment) to the Bologna process. As is known, they are: two-level training (bachelor's, master's); the adoption of a system of comparable degrees; the introduction of a European system of re-registration of credit-worthiness units (ECTS);
significant development of mobility of students, faculty and setting standards for transnational education; development of comparable quality criteria and methodologies; cooperation in the development of curricula, mobility schemes and joint training programs, practical training and research.

In the Bologna Process, Russia (since 2003) and Kazakhstan (since 2010) have been integrated completely and formally. Moreover, Kazakhstan became the first Central Asian state to sign the Bologna Declaration. Kyrgyzstan is loyal to the Bologna system and in fact borrows certain of its elements (for example, academic mobility). A two-level model of education (bachelor’s-master’s) has taken root in Russia, Kazakhstan, Kyrgyzstan. However, if in Russia the third level is postgraduate study, then in Kazakhstan - obtaining a PhD degree. The universities use the ECTS credit system and a European diploma supplement (although there are many universities in Kyrgyzstan that use non-credit but contact hours). The universities of Russia, Kazakhstan and Kyrgyzstan are actively developing academic mobility, using, inter alia, the interstate network of the SCO University. In particular, Kazakhstan implements the aforementioned state program for training the personnel reserve "Bolashak", thanks to which 3,000 young fellows go abroad annually [4].

Tajikistan, Uzbekistan and Mongolia, while maintaining the national identity of education as a whole, use a two-level model. In Tajikistan, it is used in parallel with a five-year continuous training of a specialist (and the second is preferable). In the system of higher education of Turkmenistan there is only a continuous five-year training of specialists, but there are other signs of the Bologna system: massive work is under way to conclude agreements with other states on mutual recognition of national diplomas abroad, exchange programs for teaching Turkmen students in universities of other countries. In Tajikistan, Turkmenistan and Uzbekistan, the ECTS credit system and the European Diploma Supplement are not represented. CNR is not a formal participant ICOM Bologna process, but the main features of the higher education system meet the Bologna documents. The educational system is three-level: bachelor (4 years) - master’s degree (more than 3 years) - doctoral studies (3-4 years) in PhD format.

Apparently, the degree of integration of the Central Asian countries into the Bologna process is different, which causes the preservation of diversity, national identity in their higher education systems. However, despite national differences, the orientations and priorities of the educational policies of Asian governments and universities, including rating ambitions, are becoming more similar. This brings up the question of the unity of trends in the modernization of higher education in Central Asian countries.

3. Unity of tendencies in modernization of higher education in Central Asian Countries

The modernization tendencies can be divided into internal and external ones. To internal it is necessary to carry: 1) re-structuring of high school system; 2) the expansion of mechanisms for assessing and monitoring the activities of HEIs; 3) Practical orientation of education. The external ones include: 1) expansion of network interaction between universities and the formation of university associations; 2) internationalization of educational activities; 3) virtualization of the educational process.

3.1. Restructuring of the university system

In the countries under consideration, the development of higher education is accompanied by such processes as a reduction in the number of higher education institutions and branches, a narrowing of the non-state educational sector, the allocation and priority state support of higher education institutions. In many respects this is a reaction to the hypertrophied growth in the number of universities and branches and the resulting massivization of higher education and a decline in its quality. A multiple increase in the number of higher education institutions alienated them from society, the commercial and industrial sectors, and the authorities, and in this connection they were largely cut off from the labor market.
It is noteworthy that in China in 1995 there were 5.2 million students, and in 2012, almost 36 million students, that is, for 17 years their number increased sixfold. Not surprisingly, over the past 15 years, there have been more than 500 university associations in the country.

In Kazakhstan, only in 2007, within the first stage of optimizing the network of higher education institutions and their branches, the number of universities decreased by 36, branches by 58, and later almost all branches of higher education institutions ceased to implement educational activities in higher education programs. If in 2010 145 universities functioned in the country, in 2013 - 128, then at the end of 2014 there are already 117 universities.

At the same time, the processes of selection of higher education institutions, support of a small number of elite universities, which are striving to enter the first hundred of the world universities’ ratings, are clearly visible against the backdrop of the unprescribed development of the mass sector of higher education. So, the analogue of the Russian Program 5: 100: 2020 is "Project 211", "Project 985" in China. The last two decades, the Chinese government is aimed at creating a world-class education system, which is supported by reforms and tangible financial support. Over the past 5 years, funding for education has doubled [6].

3.2. Expansion of mechanisms for assessing and monitoring the activities of universities

Such an assessment is conducted in order to improve the quality of education. It is carried out by the state and is expressed in licensing, accreditation, general and special performance monitoring procedures, as well as by non-state structures and is manifested in rating, professional and public accreditation, certification of graduates’ qualifications, etc. At the same time, there is a gradual tightening of these procedures. This trend is due to the growing complexity of socio-economic realities and the growing competition of universities.

In particular, in the context of international economic integration, it became necessary to verify the extent to which graduates of higher education institutions are ready to carry out their professional activities and how much they are needed in the labor market. In this regard, the participation of the employer in assessing the quality of vocational training of university students was a natural need. In the countries of the Asian region, the Central Asian Foundation for Management Development (CAMAN, Almaty), a non-governmental association of higher education institutions in Central Asia, was established as one of the founders of the introduction of social and professional accreditation. In 2005, the standards and criteria for economic and business education were developed and a regional accreditation system was established CAMEQ.

Moreover, there are cases when a non-state assessment of the activities of HEIs takes a priority in relation to the state. For example, in Kazakhstan, the Order of the Ministry of Education and Science of the Republic of March 5, 2008, No. 109, laid the transition from state accreditation of educational programs to professional and public accreditation. And since 2017 in Kazakhstan, it is planned to cancel the state accreditation of universities and transition to international accreditation, with the placement of state orders for training specialists only for internationally accredited universities.

3.3. Practical orientation of education

The current realities of the changing world require the interaction of higher education with the real sector of the economy, where economic actors determine the competence models of graduates. Practical orientation of training has a number of typical manifestations:

- Orientation to the development prospects of the labor market and the staffing needs of employers;
- Development and implementation of unique educational programs for corporate customers;
- Compulsory formation of competencies demanded by employers in educational programs;
- Participation of employers in the educational process.

At the same time, the majority of educational institutions in the territory of the Central Asian countries pay insufficient attention to the training of highly qualified personnel in accordance with the rapidly changing demands of the labor market. Actual problems of the social partnership "university-employer" can be considered on the basis of studies conducted in Karaganda State Technical University. The problems are common for Kazakhstan, Russia and other Central Asian countries. In the questionnaire, in which 243 experts (heads of services, their deputies, chief specialists) representing 15 mining and metallurgy, machine-building and construction industries of the Karaganda region took part, the main reasons for the low efficiency of business-production cooperation with the universities of the region were revealed. Most employers are not ready to formulate the requirements for today's graduates, while the residual approach remains: to get a ready specialist who can immediately get involved in the production process. Targeted training of specialists is poorly developed. From the financial point of view, it is more profitable for enterprises to take a ready specialist in the labor market or to limit themselves to short-term upgrading of their employees.

There are also many positive illustrations, for example, the educational-research and production consortium "Corporate University", established on the basis of Karaganda State Technical University and uniting more than 80 enterprises and organizations of Kazakhstan and Russia [7].

Serious support for the development of education in the Asian region in terms of its compliance with the needs of the labor market is provided by international organizations. An example is the Tajikistan Higher Education Development Project (2016), funded by the International Development Association (World Bank). Within this program, $15 million has been allocated to develop mechanisms to improve and monitor the quality of higher education in the country and its relevance to employers' needs.

3.4. Expansion of network interaction between universities and the formation of university associations

As is known, within the framework of network cooperation there is a closer, large-scale and long-term interaction of universities, there are systemic contractual relations, resources are being integrated, joint educational and scientific activities. At the same time, the implementation of the network interaction can be expressed through joint educational programs, academic mobility, distance learning, international accreditation, the activities of foreign affiliates, etc. The association is the most developed, highly organized and promising form of network interaction of universities. It is characterized by large-scale relations of participants in various spheres, multi-subject nature of interaction, the presence of a common governing body.

The most known associations with participation of Asian universities are the Eurasian Association of Universities, the Network University of the SCO, the Networking University of the CIS, the Network University BRICS, the International Association of Transport Universities of the APR Countries, the Russian-Kyrgyz Consortium of Technical Universities, "Association of Universities of Siberia, Far East and Northeast regions of China", "Association of Universities of the Russian Federation and the People's Republic of China", "Association of Asian Universities".

For example, the networked SCO University, which now includes 82 leading universities, is considered an Asian analogue of the Single European educational space. As you know, the Bologna system is focused on the convergence of higher education systems in Europe. Formally, both systems have common features, although within the framework of the SCO until such a high level of mobility and distribution of exchanges is achieved, as in the European model.
3.5. Internationalization of educational activities

To briefly disclose this trend can be an example of one form - academic mobility. For students of most Central Asian countries, Russia is interested in this. The cumulative number of foreign students in Russia at the beginning of the 2015/2016 school year was 237.5 thousand people. Most of them come from students of FSU countries (79% of foreign students), and 11% from Asian countries abroad. Of the former USSR countries, the most represented are Kazakhstan (36% of the total number of students from the former Soviet republics), Uzbekistan (11%), Turkmenistan (9%) [8].

Despite such statistics, the Central Asian countries, with the exception of China, given the geographical distance, the complexity of the visa regime, can not provide the same flows of academic mobility between themselves and the European states that exist between European states. A high degree of academic mobility assumes a developed infrastructure, the availability of travel grants, a high level of student and teacher proficiency in foreign languages, which so far is difficult to implement in most Central Asian countries.

It is no accident that the European Education Initiative was introduced to help solve these problems, and a little later the GIZ Program "Reform of the education systems in Central Asia", implemented by the orders of the Federal Ministry for Economic Cooperation and Development of Germany and the Federal Foreign Office of Germany in all five countries from 2009 to the present with a budget of 6.5 billion euros.

An example of solving problems at the intergovernmental level is the presidential program of passing graduate, postgraduate and post-doctoral studies in higher educational institutions of China, Japan, Russia (Umid), especially gifted students of Uzbekistan, as well as financial support from such international organizations, such as the Asian Development Bank, TACIS, OECF and the World Bank.

In general, the range of internationalization of education in the countries of Central Asia differs from a massively active (Kazakhstan) to an autarky, closed model (Turkmenistan).

3.6. Virtualization of educational process

Currently, there is an intensification of the introduction of distance learning methods and its modern version - open e-learning. This trend is expressed in the expansion of the virtual educational environment with the active use of the world's open educational resources (EdX, Coursera); development and implementation of their own open educational programs, modules and even educational portals; wide use of e-learning elements. Moreover, the potential accumulated in some Central Asian states allows us to institutionalize the virtualization of educational activities. An illustrative example is the Kyrgyz Association for Distance Education, established in 2013, which includes 18 universities in the country [9].

Despite the varying intensity of these trends in Asian countries, these modernization vectors of their national higher education systems are of a sustainable nature. Some trends stem from the key provisions of the Bologna Declaration and are developing on its basis even if there is no formal adherence to the Bologna process (internationalization based on the development of academic mobility, virtualization based on openness of education). The remaining trends are due to the similarity of the national educational policy in line with the global trends of socio-economic development.

4. Key problems of cooperation in the development of higher education in Central Asian Countries and ways to address them

The tendencies in the modernization of educational systems demonstrate a number of problems in the issues of cooperation between countries requiring joint reflection and a consolidated solution. In many respects, these problems are caused by the lack of a high level of harmonization of the educational space
of the countries in question and the insufficient study of organizational and legal issues. We believe that they include the following.

1. The problem of maintaining significant differences in the educational process of universities in Central Asian countries: the diversity in the classifiers of curricula, the periods of study and the duration of semesters, the inconsistent requirements for the amount of academic hours and educational credits required for graduate preparation, the ratio of mandatory courses and elective courses. For example, the master's program in Russia and Central Asia takes 2 years, and in China - 3. In the educational standards of China there is no specialty "regional studies" (one and 7 priority areas of the USOS), since the study of the region involved in language and international relations.

The European Credit Transfer System (ECTS) is used to reset the student's workload in Russia, and the University Credit Transfer System (UCTS) developed by the UMAP "University Mobility in Asia and the Pacific" is used in China. A great difficulty is the unification of disciplines in the re-run. The way out is the convergence of educational standards, terms of training, standards and methods for assessing the quality of education of Russian and Asian universities.

2. The problem of bilingualism, most vividly manifested in the internationalization of education. The standard is the ability to implement the learning process in two languages: national and English, but most universities can not afford it and the implementation of educational programs in English is difficult. Similarly, the professors and students of Russian universities have a weak command of Asian languages, as seen in the work of USOS, where the languages of instruction are Chinese and Russian.

3. The problem of implementing joint educational programs.

From the point of view of the current Russian legislation, the implementation of joint educational programs is the most unsettled sphere, because of which Russian and Asian universities face a number of difficulties. Especially it concerns the programs of double diplomas. Programs of double diplomas are often created not thanks to the thoughtful and systematic policies of states, but thanks to the activity of universities. The absence of a regulating base of double diploma programs seems to "untie the hands" of Russian universities, but in fact significantly complicates their development, without addressing such substantive issues as parity of diplomas / degrees. For example, although Russia and China have signed an agreement on mutual recognition documents on education and academic degrees in 1995, but the wording of the Agreement is quite general, as a result of which the practice of recognizing Russian diplomas in China relies more on traditions than on legal documents. As a result, there are practical difficulties with the implementation of international programs with the issuance of double diplomas, with the status of the Russian specialty, the degrees of the candidate and the doctor of sciences [10].

Russian universities should show flexibility and trust in partners in recognizing the educational results achieved in other countries. Almost everywhere, a Russian student who has returned after a year of studying abroad, must duplicate the course, or extradite the session externally. In China, when sending a student to study abroad for the same specialty, the subjects passed by him in the partner institution are automatically counted by the number of credits received, and not by the specific content of the training. This problem is caused by the absence of universally recognized mechanisms for harmonizing the content and developing joint educational programs, which implies the need to concentrate the work of universities in this direction.

4. The problem of inviting teachers from Asian countries to work in the Russian university, including the need to nostrify their education documents and difficulties obtaining a work visa. From this point of view, the attraction of foreign specialists from those states for which preferential migration regime and does not require the registration of documents on education. So, for citizens of Kazakhstan there is a preferential
migration regime (30 days of stay without registration for migration account, 90 days after initial setting, then extension for up to 1 year); If an academic degree is obtained in the USSR, the nostrification of the education certificates is not required. It does not require the nostrification of documents of citizens of Kyrgyzstan and Tajikistan, and the attraction of citizens of Turkmenistan and Uzbekistan, on the contrary, is hampered by the need to nostrify documents on education and this problem requires a solution at the interstate level [11].

Due to the difficulties of attracting foreign specialists for a long time as teachers in the planning of study assignments, it is possible to combine the audience and extra-auditor load, contact and non-contact forms of training, including distance learning and master classes.

To improve the quality of scientific and educational mobility, it is necessary to improve the systems of mutual recognition of scientific results, allocate scholarships and grants. It is often problematic for Russian teachers to coordinate long-term scientific missions. In China, they found a good solution: the teacher has the right to a one-year scientific vacation every 5 years, or half a year - every 2.5 years. The manual provides for scientific holidays in the composition of staffing and ties them to career growth (often to become an associate professor, it is necessary to spend at least a year abroad).

Conclusion

Thus, on the one hand, the higher education systems of the Central Asian states differ in a certain variety in terms of external and content parameters, on the other hand, they are formally or informally oriented towards the Bologna system, which indicates some convergence. Despite the different degree of development of higher education systems, all the countries under consideration experience the same trends in its development, measured only by varying degrees of intensity of processes. This naturally generates and general problems of modernization of higher education in these countries, which are mainly in the field of cooperation between states and require further joint solutions.

Footnotes

2. QS Worldwide university rankings. URL: topuniversities.com/universityrankings.


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