

**CURRENT TRENDS IN CENTRAL ASIAN HIGHER EDUCATION
SYSTEMS**

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ABSTRACT

Due to the ongoing global and regional economic, political and social processes, educational systems of several Central Asian countries (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan), once being parts of a unified educational system, have been drifting away from each other, transforming in their unique ways, under the pressure of their local circumstances. The article discusses the evolution and the current state of higher education institutions (HEI) in Central Asian countries, concentrating on such topics as the accessibility of tertiary education, its funding, digitalization, global mobility, and accreditation processes. The systems are analyzed and compared within the given categories. The purpose of this article is to characterize some trends in the development of higher education systems in these countries, which are characteristic of the current period of their political and social development.

Keywords: Higher education, Central Asia, accessibility, funding, mobility, digitalization, accreditation.

INTRODUCTION

The paper aims to review the state of the educational systems of countries of the Central Asian region and make a snapshot of the current status quo. The research considers the strengths and weaknesses of the systems of Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan context and dynamic of their development within specific categories and based on the most recent data.

The mentioned countries are compared with each other in certain categories and on the basis of statistical data. The author aims to identify some trends in the changing dynamics of the development of higher education systems in four countries of the Central Asian region, namely Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, over the past few years, which can be described as a period of gradual reforms. The common goal that unites their approaches to tertiary education is that it should contribute to the consolidation and modernization of society in each of these states. During the Soviet period, these republics had a quite successful education system (judging by such quantitative indicators as literacy, enrollment of children in primary and secondary education, scientific research, etc.), and part of this legacy has survived to this day. However, in general, the old education system does not meet the requirements of today, the need for new higher education, innovative approaches, and effective models is extremely high and acutely felt by society. The search for a solution to this problem goes beyond the sphere of education only and is connected with issues of national politics, economics, social equality, and globalization. The countries under consideration differ in a number of ways, but some core issues are similar, given their geographical proximity and common historical destinies, and this situation allows us to compare the measures they are taking in search of their own paths of progress in the field of education.

The relevance of the review lies in the fact that all of the Central Asian countries' educational systems are going through an inevitable transformational period. The need for such transformations is related to the fact that although some of the systems are closer to their Western counterparts and some are more distant, they all face quality challenges and have to react to their society's needs for competitive development accordingly. The paper collects statistical data on a number of parameters, which creates the possibility of a systematic analysis that can be useful in understanding and assessing the current dynamics in the field of higher education. The COVID-19 pandemic, which has disrupted the learning process of 91% of the world's students, including 16 million students in Central Asia alone, has had a major impact on tertiary education as students shifted to online learning and schools and teaching staff found themselves in a situation which required them to radically restructure the existing traditions and teaching technologies, for which many of them were not ready. Thus, the pandemic has become a serious test of strength not only for social institutions, health care systems, and political regimes but for all actors in the education sector.

In March 2010, Kazakhstan, the first and so far the only country in the region, was admitted as the 47th member of the European Higher Education Area and became a member of the Bologna process. The 2007 Education Law introduced the Bachelor's and Master's degrees, which were further refined in accordance with the Education Standard 2008. The Government has taken steps

to harmonize its education system with those of other members of the European Higher Education Area (EHEA) by introducing three-tier system qualifications (bachelor's, master's and doctoral studies) and encouraging universities to switch to the European Credit Transfer and Accumulation System - the ECTS system. International integrability, further internationalization and openness of Kazakhstani universities are the goals that the Ministry of Education is striving for. By the 2020-2021 academic year, Kazakh universities have signed almost 6,800 agreements with international partners in 85 countries (WENR, 2021). Kyrgyzstan and Tajikistan are not members, but, as experts say, meet the standards of the Bologna process, while Uzbekistan is not a member and does not meet these standards (UNESCO, 2021).

LITERATURE REVIEW

In a number of sources, the authors considered internationalization, accessibility, and higher education strategy policies in the region's countries, since these three concepts embody the quality of educational services in the eyes of consumers, that are students and their parents, and the main motivation for receiving them.

According to Handa (2018), one of the most effective ways to improve education is to encourage internationalization. Internationalization of tertiary education ensures the transfer of ideas, concepts, and knowledge across the globe, enriching separate educational systems. Moreover, the author states that overreliance on the traditional Western concept of higher education may be faulty, as there are various philosophies and approaches beyond the traditional ones that may prove helpful for some educational systems..

Regarding higher education policies in the region, Sabzalieva (2019) suggests a few guidelines to improve tertiary education. Firstly, regulations that concentrate on quality assurance, HEI governance, and innovation are proposed. Governments can improve these through closer interregional cooperation, higher HEI autonomy, and workload lowering practices. Secondly, there is significant room for growth in terms of work with skills. Regarding the further development of the scientific community and promotion of scientific research, several policies are suggested. HEIs could be provided with unrestricted access to international electronic journals, global research collaborations could be promoted and funded, and centers of excellence in the chosen areas of science could be created and sponsored by the government. Finally, the author suggests raising business engagement in higher education, reducing the present mismatch between the educational and labor markets.

According to the research of Jonbekova (2020), some Central Asian countries suffer the "diploma disease". In the countries with a limited number of decently paying jobs and no alternatives to the higher education system, diplomas turn into mere position ensuring tools. This partially explains the growing demand for higher education, despite tuition fees growth and relatively low quality of tertiary education that students can encounter in the region. However, this demand may not be a positive factor unless the diploma's value and usage are reconsidered in the Central Asian countries.

New methods and innovative approaches to the implementation of education in a digital format have become the object of close attention of many specialists, especially in the context of a pandemic that has had a huge impact on all aspects of the social life of mankind, including the strongest impact on the education systems of almost all countries of the world. In this regard, it is especially important to consider how universities have coped with the forced changes in the educational process in order to note the positive practice in this area and identify problematic issues that should be paid closer attention in the future. A study by the Independent Agency for Quality Assurance in Education (IQAA), conducted in November 2020 in the universities of Kazakhstan, provided some data and recommendations for further analysis of this issue. The authors analyzed the measures that were taken so that the higher education system could withstand and strengthen in the conditions of the global crisis, and even in the presence of enormous difficulties in restructuring the learning processes, they found a number of positive trends in the distance format, namely, more opportunities for students to keep in touch with their teachers, review lectures and monitor progress in their personal account, the use of modern technologies by teachers with greater efficiency (IQAA, 2021).

METHODOLOGY

As a method, the author of this article uses meta-analysis, which is an important component of the systematic review procedure. The meta-analysis, in this case, summarizes selected statistics on higher education in the Central Asian countries mentioned. In cases where there are many cohorts that did not pass the same selection criteria or were not subjected to the same collection methodologies in the same way or under the same conditions, in these circumstances, each cohort is treated as a separate statistical study, and to obtain general conclusions, meta-analysis is used. We relied on the data of statistical agencies, analytical notes, and reports of international organizations, the data of which sometimes differed, apparently due to differences in the methodology of their collection, as well as speeches by responsible persons and representatives of relevant departments from different countries. We have chosen five parameters in order to trace the trends in the development of modern higher education and compare, where possible, the situation of universities and tertiary education in Central Asia as a whole.

RESULTS AND DISCUSSION

Accessibility of Knowledge

An increase in the availability of knowledge online and the massive expansion of access to university education in both developed and emerging markets represents a fundamental change in the role of universities as the creators and keepers of knowledge. This expanded access will lead to a global “educational revolution”, the society’s transformation due to creating opportunities for millions of people to improve their living standards. For HEIs, this means new approaches in teaching and learning, creating opportunities to enter into new

markets, developing global partnerships, coinage of new tools for knowledge dissemination, and forming new sources of competition.

The COVID-19 pandemic has raised the problem of access to education at the global level, making it uncontested and inevitable.

Higher education in Central Asia enjoys a high status among younger people, as it opens up opportunities for self-realization, successful careers, and social growth. Moreover, the countries of Central Asia, like most countries of the world, are striving to move from an economy based on natural resources to a “knowledge society”, that is, relying on education and involving the majority of the population in it. This can and does lead to mass education, but it is also what many governments see as their responsibility, namely to ensure equal opportunities for all groups of young people, especially in the post-independence period. In some states, the number of students has increased significantly since independence. Target 4.3 of Sustainable Development Goal 4 (SDG 4) also highlights the importance of ensuring equal access to higher education and the quality of education. It also notes the need to strengthen international cooperation in the development of cross-border programs of higher and university education and research (UNESCO, 2016).

In order to modernize the national education system, improve its quality, as well as improve personal and social development in Kazakhstan, a state program for the development of the higher education system was adopted for the period from 2005 to 2010, and then from 2011 to 2020. In general, there is a pronounced centralization of the education system, all standards are determined by the Ministry of Education and Science (state educational standards of Kazakhstan).

At the same time, in many statistical parameters, Kazakhstan is ahead of other countries in the region. Thus, there are 120 universities in the country, of which 44 are state-owned, 15 non-civil, and 61 are private HEIs. While between 2012 and 2015, there was a minor fall in the tertiary education gross enrollment ratio (from 51.6% to 46.4% - the lowest point in the recent decade), by 2020, the percentage achieved 64% - it was the highest in the region (UNESCO, 2020). This correlates with the data from governmental statistics agency that depicts a similar picture in terms of the number of students studying in HEI, which peaked in 2006 with 775,762 active students, then gradually fell to its lowest estimate of 459,369 students in 2016, and has been increasing since then, achieving the number of 604,345 students in 2020. According to the Bureau of National Statistics, currently, only around 31% of local students who study in Kazakhstan do so in the state HEIs, while others are a part of the private HEIs student body (Bureau of National Statistics, 2021).

According to Kazakhstani legislation, the right to receive a budget is also provided to people of Kazakh nationality who are not citizens of the Republic of Kazakhstan (RK) (repatriates) and to permanently residing stateless people. Every year, secondary school graduates pass the Unified National Test (UNT), introduced in 2004 and evolving in different ways since then. Some more recent changes include a complete shift to electronic format and the possibility of passing the exam twice and choosing the highest result (Press office of the Prime Minister, 2020).

In Uzbekistan, the process of reforming education at all its levels from preschool to lifelong learning intensified with the advent of President Mirziyoyev, whose first decrees concerned the youth policy and the long-term program of higher education reform. According to official figures, 34.3% of Uzbekistan's population are children and young people aged 10 to 30 years (The State Committee of the Republic of Uzbekistan on Statistics). Overall, the higher education system of Uzbekistan is experiencing rapid growth in the number of students and HEIs, according to The State Committee of Uzbekistan on Statistics. While between 2000 and 2018, the increase in the number of HEIs and the number of students was gradual (from 61 HEIs to 72 HEIs, and from 183,600 students to 297,700 students), in recent years, it has become explosive, reaching 119 HEIs and 571,500 students in 2020. Interestingly, such growth could be partially explained by the increase in the number of branches of foreign HEIs – 355.6% increase (from 9 to 32) between 2018 and 2020.

However, these are still relatively small numbers when the total population estimates are taken into account – the tertiary education gross enrollment ratio in Uzbekistan was reported to be only 15.92% in 2021 – the lowest in the Central Asian region (UNESCO, 2021). A relatively small number of enrolled students in Uzbekistan's universities is directly related to the peculiarity of secondary education in this country. In 1997-2004, the main emphasis within the educational system was put on the development of vocational education to provide young people with competitive professional skills. After nine years of schooling, all high school students have necessarily enrolled into a professional college for a three-year specialization or to an academic lyceum with the same three-year period of study.

Only after their graduation, students could enter universities or start working according to their desires. Therefore, already having some professional training, many young people made decisions to join the labor market. Now the situation has changed, the 10th and 11th grades were returned to schools, and students choose to acquire a profession in college, a study in lyceum, or graduate from a school. In all three cases, after receiving the certificates, they have the right to enter the university (Yeniseyev, 2017b). That is why one of the planned reforms in the country is also aimed at increasing the number of educational grants.

With the implementation of the Presidential Decree of 2019 “On approval of the Concept for the development of the higher education system of the Republic of Uzbekistan until 2030”, new priority areas for reforming the higher education system were identified: the development of public-private partnerships in the field of tertiary education, increasing the level of enrollment in higher education by more than 50% based on the organization of state and non-state higher educational institutions in the regions, the creation of a healthy competitive environment, the inclusion of at least 10 higher educational institutions of the republic in the first 1,000 positions of the list in the ranking of internationally recognized organizations (Quacquarelli Symonds World University Rankings, Times Higher Education or Academic Ranking of World Universities), a phased transfer of the educational process to a credit-modular system, the introduction of advanced standards of higher education, the phased implementation of the “University 3.0” concept, which provides for a close connection between education, science, innovation activities and commercialization of research

results in higher education institutions, attraction of foreign educational and scientific technologies, gradual transfer of higher education institutions to a self-financing system and ensuring their financial sustainability etc. (Gazeta.uz, 2019).

Kyrgyzstan is guided in its educational policy by the National Development Strategy of Kyrgyzstan, the main goal of which is the development of human potential. In the Kyrgyz Republic, the number of enrolled students gradually fell from 239,208 in 2011 to 161,406 in 2017; since then, a growing trend has been picked in 2021 with 233,200 students (National Statistical Committee of the Kyrgyz Republic). Therefore, in terms of gross enrollment ratio, Kyrgyzstan holds second place in the Central Asian region, with 42.3% (UNESCO). The number of state grants per year is about 5,000. In total, there are 73 universities in the republic: 33 state, 40 private. Educational grants are provided based on the results of the nationwide testing. At the same time, 84% of students in the country study on a contract basis. According to the deputies of the Kyrgyz Parliament, higher education in the country is inaccessible to thousands of high school graduates who leave the country every year in search of earnings and become a part of the lowest-paid low-skilled labor force abroad (Information Agency 24.kg, 2017). For this reason, it is proposed to introduce a system of measures to subsidize higher education for students.

The National Development Strategy of the Republic of Tajikistan for the period up to 2030 considers higher education as a means of preparing students for entering the labor market (World Bank Document, 2018).

229,600 students enrolled in the universities of Tajikistan in 2019 according to the Agency on Statistics under the President of the Republic of Tajikistan – gross enrollment ratio of 31.3%; this was the result of steady growth since 2011 when the percentage was 22.2% (UNESCO). In 2021, 57,468 people were admitted to universities of the country at the expense of all sources of funding. In 2021, 57,468 people were admitted to universities of the country at the expense of all sources of funding. In particular, 12,317 students study at the expense of the state budget (Sputnik, 2021). In their report on the development of higher education in Tajikistan (2015), World Bank experts recognized that access to higher education is very unbalanced in terms of gender, socioeconomic status, and geographical location. Female students made up less than one-third (30%) of students in higher education. Two-thirds of students represented households in the upper 40% of the income range, and only 16% fell on the lower 40% (The World Bank, 2015). In this regard, increasing access to education is a critical task of the National Poverty Reduction Strategy. The study showed that the existing mechanism of the educational services market did not allow the functioning of private service providers. In particular, the first private universities established in the country in the first years of independence could not function due to the high tax burden and the constant interference of regulatory bodies in their activities. In addition, the adopted new tax code obliged them to pay VAT at a rate of 30%, which put their activities into question. To date, the Panjakent Tajik State Pedagogical Institute is the only remaining private university, which admits less than 2% of students wishing to receive higher education.

Thus, in the region, there are systems with mass higher education and more

limited access to tertiary education. However, in all the countries considered, in recent years there has been an increase in the number of students, which is steadily moving them towards the paradigm of mass higher education. At the same time, sufficient funding for higher education is not a guaranteed or constant factor, varying widely across the region. In those countries where educational systems are not able to provide school graduates with the appropriate conditions, many prefer to leave the country in search of better opportunities in foreign universities, primarily in Russia, which creates more favorable conditions for them, or in other countries.

Funding of Education

The higher education system funding sources are diversified in the country. The Ministry of Education and Science (MES) of Kazakhstan funds higher and postgraduate education in two ways: either by allocating funds for material and technical base improvement (for state universities only) or by so-called public contracts (state grants) to train a specific number of specialists each year. MES sets the minimum grant size and the number of available grants, strictly controlling these funds' usage. The number of state grants for the 2021-2022 academic year for the bachelor's degree is more than 56,000, for the masters – 13,300, and for doctoral studies – 1,890, preserving an increasing trend (Ministry of Education and Science of the RK). Currently, 34% of Kazakhstani students receive higher education free of charge (those who received state grants). Access to grants is open to both public and private universities that have passed the accreditation procedure. In turn, state educational institutions also have the right to accept students on a paid basis - they range from 40 to 50% of earned income. In private universities, this share ranges from 70% to 99%. Revenue from research, innovation, and other activities in HEIs is insignificant and entirely overshadowed by revenue from educational activities. It should be noted that, in general, the share of government spending on education as a percent of GDP in Kazakhstan has been falling since 2016 – from 2.98% to 2.9%. Moreover, the share of tertiary education expenditure within the falling education expenditure has also declined sharply from 15.26% in 2015 to 9.38% in 2018 (The World Bank, 2019).

The government of Uzbekistan planned to spend 1.7 trillion UZS (\$458.7 million) for the development of higher education in 2017-2021. In general, educational expenditures in Uzbekistan follow the same patterns as in Kazakhstan – a gradual fall from 6.1% of GDP in 2013 to 5.3% in 2017 (The World Bank, 2019). At the same time, about two-thirds of students pay for their education (Yeniseyev, 2017a). At the beginning of each academic year, the number of tuition fees for all higher education levels and the costs for one student studying under a state grant are determined by the Ministry of Finance. In the 2021-2022 academic year, the tuition fee for a bachelor on the basis of a contract, subject to the required number of points for the entrance exam, was starting from €1,019. In case of a shortfall in the passing score (no more than 4 points) on the basis of differentiated paid contracts, the fee ranged from €12,236 per year (Nuz.uz., 2021). Some state contracts include a monthly scholarship (European Commission, 2017b).

As stated by the Ministry of Education and Science, the Government of the Kyrgyz Republic determines the size of the state grant for education in Kyrgyzstan. Tuition fees on a contract basis in public and private institutions vary from €250 to €5,250 for undergraduate studies and up to €9,100 for those included in the master's program.

In 2020, there were 40 state universities and 17 private ones (eight of which are branches of foreign universities or joint educational institutions) in Kyrgyzstan. The number of students in state universities is 59,000 people, in private universities - 6,800 that is, only 11.5% of students in Kyrgyzstan study in private universities. The main source of funding for private higher education institutions is tuition fees. The government expenditures on education varied highly throughout the years in the republic, picking at 7.38% of GDP in 2012, falling sharply to 5.53% of GDP two years later, and finally reaching 7% by 2021.

According to the local statistics agency, there were 40 universities in Tajikistan in the 2019/2020 academic year. Training of specialists in HEIs is carried out in two parallel ways: according to the previous traditional system with 4- or 5-years training and the award of a diploma of a specialist (graduate) in the corresponding specialty, and a new two-level system of 4-year training, which ends with the award of a bachelor's degree, and a 6-year training – with the award of a master's degree. Qualification of a graduate and a master's degree corresponds to complete higher education and provides an opportunity to continue education in the system of postgraduate studies - "aspirantura" and doctoral studies. In the state budget of Tajikistan in 2017, funding for education was increased by 19.5%; expenses for it are \$73.74 million. In general, the share of educational expenditures is estimated to be around 6% of GDP.

However, according to the Agency on Statistics, in Tajikistan, only 11% of school graduates can enter higher education institutions at the expense of the state, and about 13% of the population is covered by higher education (Fergana.ru, 2021).

The Incheon Declaration adopted at the World Education Forum in May 2015 by the Ministers of Education of 120 countries, which formulated the developmental concept of education for the next 15 years, recommends allocation for the education of at least 4-6% of gross domestic product and at least 15-20% of total public expenditure (UNESCO, 2016). As can be seen from the above statistics, some states in the region comply with the recommendations, but not all. The highest-spending countries (as a percent of their respective GDPs) are Kyrgyzstan and Tajikistan, and the country that spends the least is Kazakhstan. Moreover, most of the funds in all of the region's countries are spent on preschool, primary and secondary education, which are compulsory, and it is evident that most of the countries of the region follow the same trend of lowering public expenditure on education. Data on higher education spending as a proportion of GDP was only 0.25% in Kazakhstan, 0.18% in Kyrgyzstan, 0.52% in Tajikistan, no data available for Uzbekistan. Thus, all the higher education systems in the region lack funding to some extent, which dramatically complicates further development.

Digital Technologies

While online education as a form of introduction of new technologies has existed since the 1990s, the rate of its use has accelerated rapidly over the past few years. The so-called Massive Open Online Courses (MOOCs) and Cloud technologies are exciting examples of new models of educational processes, and some of these models create significant economic value. The opportunity to study at reputable universities abroad is welcome, but it also means that local universities will have to ensure the quality and relevance of their programs offered online in order to retain students despite limited resources and audiences.

In Kazakhstan, there is an understanding that digital technology plays an increasingly important role in developing the country in today's world. The government program "Digital Kazakhstan" was created to improve the quality of life through the progressive development of the digital ecosystem and the competitiveness of the economy of Kazakhstan. Among other benefits of the program, a significant improvement in the quality of education was expected.

In the educational process of most universities, online educational technologies were used only for students of correspondence courses, people with disabilities, and for students who have left the country for exchange programs, academic internships, and academic mobility. However, with the advent of the pandemic, what was a perspective, but rarely used tool, became a necessity. Such a drastic and unexpected change put the whole educational system of the country to the test. According to the representative of the World Bank in Kazakhstan, despite the efforts to promote remote education, the pandemic can further increase socioeconomic inequality, widening the gap in knowledge and opportunities between different income groups of citizens (Marto, 2020). So far, it seems unlikely that the remote education infrastructure deployed so hastily will be used widely after the campuses reopen; however, this experience and practice may benefit the local education in the future.

In Uzbekistan, the particularly acute issue is implementing innovative pedagogical, information, and communication technologies using global Internet networks, multimedia systems, and distance learning methods in the education process. The decree of the President of Uzbekistan emphasized these key areas, along with foreign languages knowledge and their wide use to increase teacher's proficiency in pedagogical and scientific activities. This systematic work was organized in Uzbekistan with the help of the Erasmus+ by the European Commission and the British Council to invite foreign specialists. The permanent Interagency Commission under the Cabinet of Ministers of the Republic of Uzbekistan is organized to ensure effective coordination of the activities related to retraining and attestation of management and teaching staff of HEIs (European Commission, 2017a).

In Kyrgyzstan, the "Taza Koom" project, a national program for digital transformation, was launched in 2017. One of the seven principles of the program is to provide each person with the basic skills needed in the modern economy by creating a new system of primary, secondary, higher, and special education systems of continuous improvement of professional qualification levels (Novikov, 2017). It is assumed that by 2040 a new generation will grow

up that will be able to use digital tools and solutions and create new ones and use them successfully. This will allow young people to be in demand not only in Kyrgyzstan but globally. So far, the state of the project is questionable, as not much information was provided after that; some even say that the program failed (Ulukbek uulu, 2020).

According to a press release of the Open Society Institute- Assistance Foundation in Tajikistan, the implementation of the project on the development of open educational resources (OER) also began in Tajikistan. In eight Tajik universities within the framework of this project, sites are created based on the Moodle education management system, where academic staff uploads teaching materials and lectures. A single educational portal of OER provides quick access to educational and scientific materials. The project is a continuation of a similar pilot program implemented in the 2015-2016 academic year. At that time, five universities were involved; they held presentations and masterclasses on creating open educational resources and a contest for the “Best Open Educational Resource”. One of the features of this project was the training of teachers to create multimedia materials. Masterclasses were held to develop mobile applications based on the most popular and demanded educational resources (ASIA-Plus, 2018a).

The digitalization of education in Central Asia is no longer a luxury, but a dire need, with which the countries of the region are coping at different paces due to the different backgrounds. And while the pandemic accelerated the processes of digitalization of education across the whole region, and put a spotlight on them, the longevity and the quality of the reactively deployed projects are controversial. Overall, it is evident that all of the region’s countries understand the necessity for digital transformation these days; however, the availability of resources and will for such a rapid shift is questionable.

Global Mobility

The task of internationalization of education is another problem in terms of harmonization of standards and mechanisms for ensuring the quality of teaching in universities.

To define the national policy for the development of academic mobility, the Kazakhstani MES approved the “Strategy for Academic Mobility in Kazakhstan 2012-2020” and its Implementation Plan, which provides that “by 2020, 20% of Kazakh students will be mobile” (Ministry of Education and Science of the RK, 2012). Within the framework of this initiative, legal conditions for ensuring mobility have been developed and implemented (Ministry of Education and Science of the RK, 2018). However, it is difficult to say if all of the program’s goals were met, as between 2011 and 2020, around 18,000 Kazakhstani students were able to study abroad within the program of academic mobility (Inform.kz, 2021). Most of these students paid for their foreign studies themselves (Ministry of Education and Science of the RK, 2019). And at the beginning of 2020, the spread of COVID-19 blocked the implementation of all international programs in all countries of the world. However, the accession of Kazakhstan in 2010

to the Bologna Declaration (Seidakhmetova, n.d.) has expanded the range of opportunities for local students, and the fact that the European region is the most popular destination for Kazakh students in terms of academic mobility has been the result of this policy. Many other documents regulate academic mobility and internationalization processes, such as the Presidential program “Bolashak scholarship,” which is an essential source of financing outgoing mobility for citizens of Kazakhstan. MES annually allocates funds for outgoing credit mobility - within the framework of the program, more than 3,000 Kazakhstani students were trained in the universities of Europe, the USA, and South-East Asia for one semester in such priority areas as education, humanities, and technical sciences and technology, agricultural sciences, veterinary science. MES also plans to increase the number of international students in the RK, bringing their number to 50,000, while currently, there are around 35,000 international students in the republic (Inbusiness.kz, 2020). The largest share comes from CIS countries, as well as China, India, Mongolia. The main areas of study are engineering, science and technology, health and social welfare (medicine), and social sciences, economics, and business. Interestingly, according to the MES representative, the pandemic didn't affect the number of international students negatively, as they were able to switch to remote learning quickly (Inbusiness.kz, 2020).

Concerning the mobility of academic staff, in 2009, the Ministry of Education and Science began funding the “Invited Professorship” program so that HEIs could invite the most prominent experts in their fields to lecture, consult and collaborate in research. Since the beginning of the program, about 7,000 professors from Europe, the United States, Asia, and Russia have visited Kazakhstan and taught at universities. During this period, 209 joint research projects were launched, and 86 units of educational, scientific, and methodological literature were jointly published. Moreover, within the separate program, more than 100 foreign top managers in the academic field have been invited and worked in Kazakhstan since 2016 (Inform.kz, 2021).

The Erasmus+ (E+) program and its predecessors (Tempus and Erasmus Mundus) made an outstanding contribution to strengthening ties between the universities of Kazakhstan and Europe. The participants were acquainted with the European experience in developing programs based on competencies, strengthening interaction with the world of work, and improving universities' management. Within the framework of Erasmus Mundus, over 700 Kazakhstani students and teachers passed short-term training or received a master's degree and Ph.D. in European universities.

Regarding intraregional mobility, it is interesting to note that according to UNESCO, 26,130 students from Uzbekistan studied in Kazakhstan in 2020; Turkmenistan held the second position in these terms with 3,294 students, while there were 1,161 and 613 students from Kyrgyzstan and Tajikistan, respectively. In 2019, between 2,000 and 2,500 students from each of the Central Asian countries except Turkmenistan were studying in Kyrgyzstan. The latest available data for Tajikistan concerns 2017, when 1,210 students from all of its Central Asian neighbors altogether were studying in the republic. Finally, Uzbekistan was able to attract about 500 students from its neighbors overall in 2019.

Student mobility in Uzbekistan is organized through assistance from specific international programs, such as E+, Fulbright (USA), DAAD, Great Britain Chevening Program, and several programs financed by China, France, Japan, the Russian Federation and Spain.

About 700 students from Uzbekistan have benefited from long-term grants for mobility to study at European Partner University under the Erasmus Mundus cooperation and mobility program. The Credit Mobility projects under E+ started in 2015, including 30 HEIs of the Republic and 28 European universities that provide for 253 participants, including 183 students of Uzbekistan (Uzbekistan-EU) and 70 program participants from EU (EU-Uzbekistan). In 2016, 107 Uzbek students received scholarships for education in Europe, and 12 Ph.D. students from the EU arrived in Uzbekistan. Besides, 76 Uzbek employees of HEIs spent mobility abroad in Europe, and 58 scientific and teaching employees of EU universities shared their experience and knowledge in Uzbekistan.

In 2020, the government of Uzbekistan announced an “Academic Mobility” program implementation in the country. The program implies support in the form of short-term internships in foreign universities, and research centers for gifted youth of the country engaged in scientific activities (UzDaily.com, 2020).

The academic mobility of students in Kyrgyzstan is carried out within the framework of intergovernmental and interdepartmental agreements and special projects. In this sphere, the Ministry of Education of the Kyrgyzstan cooperates with Belarus, India, Japan, Kazakhstan, Russia, Tajikistan, Turkey, Ukraine, and the Commonwealth of Independent States (CIS) and the Shanghai Agreements.

The Japan International Cooperation Agency (JICA) promotes cooperation in education between Kyrgyzstan and Japan, and German International Cooperation (GIZ) and the DAAD provide interaction between Kyrgyzstan and Germany. In addition, students of educational programs are selected through competitions held by the embassies of India, Japan, South Korea and the USA in Kyrgyzstan. Cooperation with universities in China is carried out as part of the student exchange program of the Confucius Institute. A unique role is played by the projects of Tempus and Erasmus Mundus, by which in recent years a significant amount of academic mobility of employees has been conducted. Kyrgyzstan, in turn, accepts students from abroad; students from India are trained, mainly in medical schools, as well as from Kazakhstan and Tajikistan. More than 220 students and teachers from Tajikistan received scholarships for training, teaching, and internships in universities in the European Union countries. For the 2017-2018 academic year, 600 quotas from Russian universities were allocated for Tajikistan; teachers from Russia conducted the selection of applicants. Kazakhstan also annually allocates 100 quotas for students from Tajikistan, and it was reported that young people from the most remote areas of the country come to Kazakhstan to get a medical education there (Tajik Development Gateway, 2017).

European programs and projects play a central role in developing academic mobility in the Central Asian region, although internal resources are also used in some of the states. With the natural dominance of the European vector, it is also necessary to develop intraregional academic mobility to strengthen cooperation

and maintain confidence and good neighborly relations. However, in 2020 and 2021, as a result of the COVID-19 pandemic, there was a significant decrease in the number of outgoing students both within the region and beyond.

Accreditation

One of the important steps to improve the quality of education in modern conditions was the tightening of independent accreditation processes in the Central Asian republics. Accreditation, along with the ranking of educational organizations, is considered the most important tool for improving the quality of education. However, due to the complexity and some organizational and psychological unpreparedness for the internal restructuring of the system, the accreditation process is still in its infancy in some of the systems under consideration. It is difficult for governments and departments to abandon the usual centralized state control, and transfer a significant part of the supervisory functions to external bodies. However, it is this tool - voluntary accreditation by external bodies - that should be one of the most significant changes in quality assurance mechanisms.

Based on the study and analysis of standards and criteria of foreign experience, the Independent Kazakhstan Agency for Quality Assurance in Education (IQAA, 2021) developed procedures and standards for independent national accreditation. As a next step, the Ministry of Education and Science of the RK recognizes 11 accreditation bodies: six Kazakh agencies that can accredit both universities and individual academic programs; and five international agencies that are only allowed to accredit certain programs. Since the early 2000s, Kazakhstan has begun to introduce stricter licensing rules for higher education and introduce a system of voluntary accreditation. As a result, from 2005 to 2021, the number of universities in Kazakhstan has decreased by a third, from over 180 to 120.

An incentive for higher education institutions to undergo independent national accreditation is the fact that the placement of state educational grants for the training of specialists is provided only for accredited institutions. As of 2020, 92% of Kazakhstani HEIs have received institutional accreditation, and 96% have received program or specialized accreditation (WENR, 2021).

In addition, starting from 2021, accredited public and private universities must present their own diplomas to graduates instead of the previous state diplomas with the seal of the Ministry of Education and Science of the RK.

Similar accreditation processes, perhaps with a lesser degree of rigidity and compulsion so far, are being initiated in other countries of the region. Thus, Kyrgyzstan has already introduced independent accreditation, and the State University of Economics and Finance of Tajikistan has passed the international accreditation of the Independent Agency for Rating and Accreditation (HAAP) of Kazakhstan and received the appropriate certificate (Avesta, 2021).

An assessment of the quality of education at the international level can be obtained through national, regional, or world university rankings, which, although they do not consider education systems as a whole, do provide some insight into the position of universities in various parameters, focused on certain aspects and

achievements. “Rankings” refers to the hierarchical ranking and comparison of HEI performance, efficiency, and other characteristics based on specially selected metrics. Measures can vary considerably and may include, for example, research, funding, donations, or the gender ratio of students. Understanding the results of such ratings allows you to make tactical decisions to improve the development strategy of educational institutions. However, experts warn that world rankings often include unrelated and disparate indicators, which are then combined into a single assessment that is not always clear and objective (Ashwin, 2020). When analyzing ranking results, one should always take into account the relativity of the evaluation criteria and understand that any university can have strengths in some areas, and not be included in the leading group in other areas. Often universities do not set themselves such a goal. For example, Impact Rankings 2021: quality education (Times Higher Education) included 12 universities in Uzbekistan and 8 universities in Kazakhstan in its list, measuring the contribution of universities to early and lifelong learning, their pedagogical research and their commitment to inclusive education (THE, 2021). At the same time, a number of Kazakh universities were included in the top 1,000 in the QS World University Rankings 2021, which measures very different parameters: Academic reputation, Employer reputation, Faculty-to-student ratio, University staff citations, Foreign faculty-to-student ratio. Although the 165th position of Al-Farabi Kazakh National University is impressive in this ranking, Kazakh universities have shown worse results in other major international rankings. A total of three Kazakh universities have been included in The Times Higher Education World University Rankings 2022, which include more than 1,600 universities across 99 countries and territories. However, they didn’t even make it into the top 1,000 but only into the 1,200+ group. There are no Central Asian universities in the Shanghai Academic Ranking of World Universities (ARWU, 2021). But in the ranking of countries in terms of the quality of the education system of the CEOWorld magazine, Kyrgyzstan took 55th place, and Kazakhstan - 62nd position out of 93 world universities. All this variety of data can not only give a clear idea of the level of development of the actors in educational systems, but rather confuse the perceptions of students, parents, employers, and university employees themselves regarding the assessment of the quality of their work. This illogicality once again confirms that the rating system, if it is not about shaping the prestige and image of an educational institution, should be treated with extreme caution.

CONCLUSION

It must be recognized that the large-scale use of educational monitoring statistics and the “lack” of expert discussion of the results of national studies still remain a serious problem. Some critical educational reforms are in the implementation process in the region, and there is certainly a potential for further improvements.

One factor that can accelerate the implementation of reforms is cooperation with foreign actors represented by international organizations, foundations, programs. In particular, the European Union is fruitfully working with the region within the framework of the “Central Asian Education Platform” project, funded by the European Commission.

Along with this, strengthening intra-regional cooperation, in the form of joint educational programs, development of academic mobility, allocation of quotas, and grants for the most popular specialties could successfully create competing centers of attraction for international students, dramatically improving the quality of national educational systems. From an economic point of view, educated specialists raise the level of national development, innovation, and technology, while in the context of the development of human capital, the crucial role of the education sector is undeniable.

The understanding of respective local problems and recognition of the need for reforms, and the wish to implement successful international practices are present. Nevertheless, insufficient funding, weak governance, unwillingness to move away from traditional and convenient ways of development negate many positive impulses and plans of local Ministries of Education. The problems caused by low levels of public spending on higher education seem to be exacerbated by the misallocation of funds. During the difficult period of the global crisis of the last two years associated with the pandemic, it was the education sector that turned out to be one of the least prepared for the radical transformation of its activities from offline to the online format. Although, all universities in the world were forced to adapt to changes in the shortest possible time and spend significant financial and human resources to accelerate the restructuring of the remote format. However, low government subsidies continue to dramatically reduce the quality of teaching in Central Asian universities. As for the quality in the higher education sector, it is one of the urgent problems in the academic community. By monitoring and researching the sphere of higher education, as well as analyzing the sources and the current situation in the tertiary system of higher education in the Central Asian countries, it can be concluded that there is no single way to assess the quality of systems and universities. However, moving towards the selection and standardization of a certain set of logical and reasonable criteria within the framework of accreditation and target ranking, focused more on educational programs rather than universities, can have a significant positive impact on the assessment, and then improve the quality and effectiveness of the higher education in general.

The massification of education with the departure of some students from the country to study at foreign universities, the decline in public investment in higher education without sufficient compensation from other sources of funding, the urgent need for digitalization, again not always supported financially, without which its development seems impossible, the growing academic mobility, abruptly interrupted by the spread of a dangerous virus, and, finally, attempts to find universal tools for measuring the quality of education in accreditation and rating mechanisms - these are some, although not all, of the main trends in the gradual transformation of higher education systems in the countries we have considered, manifesting themselves with greater or lesser intensity. It is important that the dynamics of processes, trends and the desire not to stagnate and enter the international educational space for the sake of a worthy future for their peoples emerge behind the statistical indicators, which can change annually.

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