

# BOLOGNA PRINCIPLES AND QUALITY ASSURANCE OF KAZAKH HIGHER AGRICULTURAL EDUCATION

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## ABSTRACT

For the development of higher education after the collapse of Soviet Union, Kazakhstan decided for combination of own approach and European educational system. Several reforms were implemented since that time. Our paper attempts to analyse current level of Bologna system implementation in Kazakh agricultural HEIs. Mainly qualitative methodology of desk-research of strategic documents, followed by focus groups discussion, interviews and open-ended questionnaires were used for data collection from two major agricultural universities in Astana and Almaty. Based on our results, we can conclude, that the quality assurance of Kazakh agricultural higher education is already well developed and most of the basic principles of Bologna system are already implemented. Both HEIs have also many elements of internal quality assurance system in place. However, the activities in the field of quality are still regulated and demanded externally mainly by the national legislation and ESG standards for internal quality assurance are implemented rather unsystematically.

## KEYWORDS

Bologna Process Expansion, European Standards and Guidelines, Internal Quality Assurance, Kazakhstan

## INTRODUCTION

After the collapse of Soviet Union, newly founded countries such as Kazakhstan had to start their nation building process and reform many aspects of their government and laws, including the educational system, which had to be transferred from the Soviet scheme into a new one. In term of higher education, there were two principal possibilities: European and American standard of educational system. Kazakhstan decided for combination of own approach and European educational system which is represented by the Bologna Process.

Identified as the most considerable and wide-ranging reform of higher education in Europe

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since 1968, the Bologna process aimed at creating the European Higher Education Area (EHEA), in which academics and undergraduates will have greater mobility and their qualifications will be recognized. It is one of the biggest revolutions in higher education system and it became a symbol of globalization in the educational space. It is based on a set of criteria that universities should fulfil - such as European Credit Transfer and Accumulation System (ECTS), 3-cycle higher education system (bachelor's degree, master's degree and PhD programme), lifelong learning and others so a national educational system can be integrated with the international one (EHEA, 1999). EHEA has currently 48 countries with full membership, including Kazakhstan. Several important steps for internationalization of Kazakh higher education were already successfully implemented, while several other challenges remain. Our paper attempts to analyse current level of Bologna system implementation in Kazakh higher agricultural institutions.

### **Evolution of the system of Kazakh higher education after the collapse of the Soviet Union**

In Kazakhstan changes came quickly after declared independence in 1991. The quality of education was emphasized as an important pre-condition of the future well-being of the country, as confirmed by the President of the Republic of Kazakhstan, Nursultan Nazarbayev, in his "Kazakhstan 2030" Strategy (Nazarbayev, 1997). Quality education was recognized by the head of state as a prerequisite for the realization of the potential of the new young generation, and at the same time the privileged means for the development of relations and friendship between the countries of Central Asia.

The reform of higher education targeted the restructuring of the system in order to open it to other countries of the world. It can be divided into four stages (based on Kukeyeva et al., 2014):

The *first stage* (1991-1994) focused largely on forming a legislative basis for higher education. In 1993, Kazakhstan's law "On higher education" laid the groundwork for accomplishing these tasks. In 1994, Kazakhstan approved a state standard on higher education, which introduced bachelor's and master's level degrees. Former institutes with a five-year program were converted into universities and academies with the four-year bachelor and one or two-year graduate master's programs.

The *second stage* (1995-1998) involved active measures aimed at modernizing Kazakhstan's higher education system. These measures included introducing a new list of specialties consisting of 342 specialties and promotion of private institutes of higher education.

The *third stage* (1999-2000) was characterized by decentralization of education management and financing, including expansion of academic freedom of educational organizations. In June 1999, Kazakhstan adopted a new law titled "On education" as well as a "model for the formation of a student society in institutes of higher education". The basis of the new model consisted of the implementation of entrance examinations for applicants in all specialties across the country, carried out by an independent and impartial body.

The *fourth stage* of Kazakhstan's education reform has been in process since 2001. This period is characterized by adopting a system of three-stage education. Other prominent features include the creation of a national education quality assessment system.

In March 2010, Kazakhstan became a signatory to the EHEA and as one of the first states of former Soviet Union joined the Bologna process and started full transformation from soviet system of education into a western one. Kazakhstan was praised for pioneering

efforts to reform its higher education system in accordance with the guidelines of the Bologna process. Consequently, the scale of the Bologna process to Kazakhstan's higher education system seeks to (Maudarbekova, Mizikaci and Dyusembinova, 2015):

- 1) Find a harmonious balance between Bologna convergence and state originality;
- 2) Establish the internal balance between the stages of the Bologna Process.

The implementation of the Bologna process included change of length of higher education studies from 11- year Soviet model to divided western one. Model of three-stage higher education looks as follows: 4-year Bachelor's degree (for some specialities as Veterinary or Architecture students study 5 years), 1-2-year Master's degree (1,5 Master's for professionals or 2-year Master's for scientific – pedagogical workers) and 3-5 year doctorate. Other important aspect was introduction of the ECTS and mutual acceptance of education programs. Now, there is one scientific degree - PhD and two academic distinctions are awarded by the Ministry of Education and Science of the Republic of Kazakhstan (the MES RK): associate professor (docent) and professor (Zhumagulov, 2012 in Nessipbayeva and Dalayeva, 2013). Later on agreements on cooperation in education area have been signed with more than 20 countries (Turumbetova, 2014).

Another important step for deeper internationalization of Kazakh higher education system so far was signing Magna Charta of universities which is the base of the Bologna Declaration. By the year 2015, 30 Kazakh universities already signed this document.

### **Kazakh agricultural higher education**

The higher education institutions (HEIs) functioning in Kazakhstan are universities, academies or institutes. Conservatories, higher schools and higher colleges have a similar status. In line with the Law “On Education”, selected state HEIs were granted the special status of “national universities”.

In 2009, there were 144 higher education institutions (55 State HEIs and 89 private). The number of non-state (private) institutions was gradually increasing until 2001 and began to decline in 2002. On November 26, 2012 after an optimization process 139 universities remained in Kazakhstan. For the 2009 – 2010 academic year, the total number of students in HEIs was 610.2 thousand. On average, there are 232 students per 10 thousand persons in the world. In Kazakhstan, this figure is 422.5 people (EACEA, 2012).

In the country, there are 3 main agricultural universities in cities of Astana (S. Seifullin Kazakh Agro-Technical University), Almaty (Kazakh National Agrarian University) and Oral (Zhangir-Khan West Kazakhstan Agricultural & Technical University). None of them is private. There are also other generally oriented universities (usually with statute of State HEI) with one or two agricultural-related faculties, for example:

- Sh. Ualikhanov Kokshetau State University with 5,000 students and 500 students studying at Agrarian – Economic Institute
- A. Baitursynov Kostanay State University with 20% of students studying at two agricultural faculties
- Pavlodar State University S. Toraigyrov with one agricultural faculty attended by 10% of university's students
- North Kazakhstan State University with 5% of students at one agricultural faculty
- Shakerim Semey State University with one agricultural faculty
- M.O. Auezov South Kazakhstan State University with one agricultural faculty
- Taraz State University M. H. Dulati with one agricultural faculty

## AIMS

All Kazakh agricultural universities have embarked on the journey of implementation of Bologna system since the country entered officially into EHEA in 2011. Number of important steps have been already implemented, while several challenges are yet to be overcome. Our paper, which is using the case study approach, aims to analyse current level of European standards implementation on the two biggest higher agricultural institutions in two major cities – Astana and Almaty. Systems of internal quality assurance play special role as the backbone of the European de-centralized systems.

## METHODS

In preparation of this research, the authors relied heavily on desk-research of published materials and information, including the text of laws on education, statistics on the agricultural HEIs, and additionally the impact of the Bologna process. Also, the analytical reports on the development of higher education in the Kazakhstan were given certain values according to the European Union Erasmus+ Program.

The qualitative methodology of focus groups discussion, interviews and open-ended questionnaires were used as the main methods, especially for data collection at S. Seifullin Kazakh Agro-Technical University (KazATU). The small working group comprised researches and 2 teachers, 2 representatives of the management and 1 specialist from Quality unit of the KazATU university. During the first face-to-face meeting in February 2016, initial pilot discussion framed the process of the whole research. After the period of desk-research, additional data was collected by the questionnaire communicated via email. The second face-to-face meeting of the group was organized in June 2016, where all the details were clarified and the results finalized. For Kazakh National Agrarian University (KazNAU) mainly secondary data and observation were used.

Majority of data was collected within the Erasmus+ Programme of the EU under the project *Enhancing Capacities on Implementing of Institutional Quality Assurance Systems and Typology of Using Bologna Process Principles* (IQAT) number 561685-EPP-1-2015-1-CZ-EPPKA2-CBHE-JP (IQAT, 2015). The project, which was implemented from 2015 till 2017, included partners from the Czech Republic, Slovakia, Latvia and Spain, and aimed on building of capacities of 6 central Asian universities in Kazakhstan and Uzbekistan.

As a main theoretical framework of the data collection tools, the standard structure of European Standards and Guidelines for quality assurance in the European Higher Education Area - ESGs was used.

The two analysed agricultural universities were:

Kazakh National Agrarian University (in Almaty)

Established in 1929 as Veterinary Institute. It was the first agricultural and the second HEI in Kazakhstan. It is non-commercial joint-stock company accredited for educational activity given by state Committee for Control of Education and science. In 2001, Kazakh State University of Agriculture was given a special status in accordance with the Decree of the president and the University became Kazakh National Agrarian University. In 2015, the university had 7,217 students (6,063 undergraduates, 1,021 masters and 133 doctoral) (KazNAU, 2015).

S. Seifullin Kazakh Agro-Technical University (in Astana)

Established in 1957 as Akmola Agricultural Institute. It is the largest agrarian HEI of

Central and North Kazakhstan, the first HEI of Astana. In 2007, the University was handed over to the Ministry of Agriculture and reorganized into the State HEI turned into joint-stock company. Number of students in 2015 was 9,707 (KazATU, 2016).

## **RESULTS**

### **Current level of the implementation of general Bologna principles at studied agricultural HEIs**

In September 18, 2009, the KazNAU joined officially the Great Charter of universities for support of the basic principles of the Bologna process thereby entered the European educational space. Since, it has realized training of specialists on divided levels - Bachelor's, Master's and Doctoral, introduced credit technology for evaluation of teaching, and actively established cooperation with many overseas universities. According to the second strategic direction – “Training competitive specialists” one of the aims is: “to improve the educational quality by ensuring the implementation of the Bologna process principles” (KazNAU, 2015).

At KazATU wide range of principles of the Bologna process are already implemented as well. First, there is the clear structure of the study programmes according to the scheme Bachelor –Master – PhD (doctoral). This structure is practices at all faculties.

At the same time the ECTS credit system is also implemented though with some specific rules. These rules can be found in the “Guide book” for students of KazATU: “*Over one semester the student shall master 12 – 18 credits, and during academic year at least 30 credits including 100% compulsory component courses*” (Sec. 2.2). “*To complete Bachelor's programme a student is to complete at least 129 credits of theoretical training and at least 10 credits of field internship and 4-8 credits of thesis defence*” (Sec. 3.3). Students now have the opportunity to build an individual study program based on personal needs and opportunities. To assist students in choosing their path of study at the university it is established a service of academic consultants - advisors.

After graduating, students obtain the state diploma with the Diploma supplement in three languages (Kazakh, Russian and English). If students request it, they can get standard European Diploma Supplement. KazATU is also full member of the Great Charter of Universities, which is the basis of expansion of European educational space.

### **Current level of the implementation of internal quality**

In addition to regulations of the MES RK, several internal regulations are in place at both universities. The internal assessment of education quality is the responsibility of HEIs themselves and includes various procedures of self-assessment and monitoring of academic achievements. This is fully compatible situation suggested for HEIs in Europe by the European University Association.

First of all, in terms of internal quality assurance, both universities have a well elaborated Quality Management System (QMS) in accordance with the norm ISO 9000. This system has been built during several years and covers almost all activities at the university. In the framework of this system some measures have been similar to the ESG standards. All the ISO 9000 measures are described in respective documents, but only some of them are publicly available.

At KazATU the Quality Service department has been established in 2004. The main task of this department was to create and implement the QMS and strategies. The department has these functions:

- to maintain the QMS in a working state,
- to monitor activities of individual units of KazATU by internal audits,
- to coordinate the preparatory works for institutional and specialized accreditation and to give consultations and methodological leadership,
- to gather and analyse data and information for participation of KazATU in international academic ratings,
- to organize the gathering of data and information for the complex evaluation of various units of KazATU,
- to supervise the documents about QMS, to secure the evidence and archiving of them.

Main priority areas in the field of education defined by the QMS are: qualitative training of specialists for the agricultural sector, competitive recovery and increasing the rating of the university both on the national and international level, the successful integration into the global educational and scientific space.

The important tool in QMS at studied universities is the internal audit. Its aims and procedures are at KazATU in details described in special document, which was issued in 2015. The internal audit evaluates the degree of the correspondence of the QMS with the norm ISO 9000 and with other relevant standards and contracts. The procedure of the internal audit is determined by the respective norms ISO 9000. However, evaluated activities are not specified in detail in the document.

As a more specific and closer to ESG approach may be regarded other instrument - complex evaluation of faculty departments. This new tool was specified within the framework of QMS in 2016. Assessment of HEI operation also includes the opinion of students on the quality of the teaching process. It is organized based on the questionnaire. Another specific tool of QMS is the system for determining academic ratings of lecturers and related system of the incentives.

Employers are also involved in the assessment of professional competence of graduates. Every year, in accordance with the order of the rector of the university, a meeting of senior students and employers is held at the departments' level. During the meeting employers give an assessment of knowledge of graduates on topical issues of professional activity (knowledge of modern legislation in the relevant industry, knowledge of new technologies and international standards etc.). The feedback goes back to the departments and to the program majors.

In terms of rankings the KazATU is a leader not only in the capital, but it is also among the top three out of thirty technical universities of the country. Agency for Research QS ranked KazATU into the world's 601+ universities, among 8 Kazakh Universities.

In March 2016, the Independent Quality Assurance Agency (IQAA) held a ranking of the best universities of Kazakhstan and the ranking of educational programs for specialty groups. In this rating, KazNAU took third place in the national ranking of the best technical universities of Kazakhstan (KazNAU, 2016).

### **Implementation of individual ESGs in internal quality assurance**

At the moment, the ESGs are not explicitly mentioned in any studied HEIs documents, however, most of them are implicitly involved in some activities related to the QA at institutional level.

In this part, we will indicate the most important of them:

- In relation to the ESG standards 1.1, there is not any publicly available policy document specifying internal quality assurance.

- Standard 1.2 discusses the importance of quality assurance of study programmes. At this moment, the study programmes are evaluated and approved by the MES RK and they are not subject to any specific internal evaluation. So there is not too much space for the institutional activity and QA at institutional level. Curriculum design and delivery is normally regulated by the MES RK. State standards are followed for core courses in all academic programmes offered by both public and private HEIs. State Compulsory Education Standards are developed in line with the Government Decree “On the procedure of developing, approving and term of validity of state compulsory education standards (SCES)”. There are two components of the SCES – a mandatory and an optional component. Generally, around 50% of the total academic workload in all academic programmes is mandatory and the other 50% is optional.
- ESG standard 1.3 specify the student-centred teaching according to published criteria, regulations and procedures. KazATU certainly has these regulations in some form but not explicitly in one document. The way of teaching, including the student-centred teaching is mostly left to the responsibility of the individual teachers. In recent years, the student-centred approach is preferred, nevertheless many lecturers still favour the teacher-centred approach because it is the way they were thought during their student years.
- ESG standard 1.4 deals with the students’ admission and progression. Admission to HEIs is carried out based on the Standard Admission Rules approved by an Order of the MES RK. The admission of students leaving secondary schools is based on the results of the Unified National Test (UNT). The rules and regulations for regular examinations have been developed at national as well as institutional levels of both analysed HEIs and they are (mostly publicly) available. Usual practice is that the assessment is carried out only by one assessor while the commission carries out the final examinations. Each student can use the formal procedure to appeal (against received marks, for example), if needed. Conditions for progression from one year to the next are regulated by an external Order of the MES RK. According to the Order it is mandatory to fulfil all the requirements of the curriculum of the previous academic period and pass an interim assessment (attestation). Graduates must pass the final state attestation in the form of a state examination and defence of a thesis (diploma) or project. Since July 2004, an interim assessment has been introduced - the Comprehensive National Mid-Term Test that third year students of medicine and all other second year students must take. Only those who have passed this test can remain enrolled. The problematic area of Bologna principles implementation is the recognition of HE studies and diplomas. It is regulated and made available only from the national level (the MES RK plays the main role).
- ESG standard 1.5 on “Teaching staff” focuses mainly on teachers recruitment, conditions of employment, professional development, teaching and research connections and teaching methods innovation including ICT exploitation. At both analysed universities, it is rather strict and well elaborated. It is a consequence of detailed regulations stipulated by the Law on education (the section related to the status of pedagogical staff sets that they are state employees). There are also institutional evaluation mechanisms of teachers (including the students’ evaluation of teaching through questionnaires), salaries’ bonuses (motivation) of successful teachers including their research achievements, special programmes for young teachers, teaching/training courses on teaching method innovation, ICT in education

for teachers etc. The problem can be found in the lack of public information about these activities. KazATU organizes regular evaluation of teachers, however the respective document(s) with results are not available. The students' questionnaires enabling to express her/his own view on quality of teaching are quite usual. Another possibility of students to enforce their views on various matters connected with their rights and responsibilities are the students' organisations.

- ESG 1.6. "Learning sources and students' support". The accreditation requires, in accordance with ESG, that teaching is usually left on the teachers themselves so for example the student-centred learning is not supported from the faculty level.
- ESG standard 1.7 "Information systems". Both universities have the own information system and gather the information and data about all topics mentioned in this standard. This is the responsibility of the Quality Service department.
- ESG standard 1.8 "Public information". Both HEIs publishes some information about offered study programmes on their website but the information is not so exhaustive as the standard supposes (no clear, up-to date and readily accessible data in accordance with ESG Standard recommendations).
- On-going monitoring and periodic review of programmes and Cyclical external quality assurance (Standard 1.9 and 1.10) are the processes running under the national legislative framework and thus rely on external quality assurance systems only.

The topic, which is going through all ESGs and the topic that is still to be developed is the students' participation in internal quality management. Active participation of students in this area is so far strongly overlooked. Student Councils are now mostly a symbolic gesture.

## **DISCUSSION**

The transformations that have affected the former Soviet countries, including Kazakhstan, were very deep and influenced almost all aspects of society (Hoen and Irnazarov, 2012; Aristei and Perugini, 2012). Our results show, that several important steps have been already implemented towards the harmonization with European Bologna system, including some standards for internal quality management of more decentralized educational system. However, some authors claim that higher education in post Soviet countries, including Kazakhstan and even Russia, continues to stagnate after the collapse of Soviet bloc even though quality of life is getting better and financial investments into science and education are increasing (Suleimenova et al., 2013; Dobryakova and Froumin, 2010). One of the big factors is a fact that last generation of students was raised in the transition period when educational system was going through major changes and therefore was not fully operational. From this period, many stereotypes are still alive. The main way to reach success are various corruption instruments, personal level of income and family-clan ties. The level of education has still minor influence on a career. This phenomenon is not problem only in Kazakhstan, it can be found in other countries with similar historical background (Obukhova et al., 2015).

The government tries to offset Slow pace of transformation of Kazakh higher education in some areas by involvement of Kazakh universities into European projects (Erasmus+ or formerly Tempus) and at the same time by widely available exchange programs for students and lecturers. More than 5,500 citizens of Kazakhstan study currently in over 35 countries around the world. Participants have full funding of all expenses during the time of their studies abroad but only under the condition that after graduation participant

must go back to Kazakhstan and work five years for the government. These are supposed to bring to Kazakhstan missing know-how in various fields and they are expected to be qualified to teach a new generation of students (Turumbetova, 2014).

## CONCLUSIONS

To summarize our findings, it is clear that quality assurance of Kazakh agricultural higher education is already well developed and most of the basic principles of Bologna system are already implemented. Both HEIs have many elements of internal quality assurance system in work. However, the activities in the field of quality are still regulated mainly by the national legislation (Law on Education) complemented by the several other normative documents like Standards for institutional accreditation for higher education institutions. Therefore, Kazakh HEIs have not any strong incentives to develop their autonomous systems of quality assurance. Nevertheless, the move from quality control towards quality assurance is gaining strength.

In terms of implementation of Standards and Guidelines for quality assurance in the European Higher Education Area (ESG), even though they are not explicitly mentioned in any internal guiding documents, they are elaborated in external quality assurance normative documents. At the internal level, some of them are implicitly present in similar practices.

Typical problem of current internal quality assurance is public availability of information. Even the quality policies and elements of the internal system are divided into several tools and are described in several documents. But the unification into one guiding document specifying general quality assurance policy, which can be available for example on the website of the university, is still missing.

Some of the elements of the systems seems to be very rigid. The control of teaching staff, for instance, is too heavy and top-down, which is probably not helping to improve teaching process itself. The teachers follow the strict rules, trying to fit into the given categories, but they are losing time and energy for their teaching performance.

The knowledge about the evaluation activities is not well distributed among the university employees. Also, students are not involved systematically into the process.

Despite many unrelated activities which focus on quality improvement, the results are not systematically available freely within the institutions. Regular reports on achievements of quality assurance are not published, they are used only for internal purposes of the top management. Therefore, any feedback or learning process is not supported.

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## REFERENCES

Aristei, D. and Perugini, C. (2012) 'Inequality and reforms in transition countries', *Economic Systems*, vol. 36, no. 1, March, pp. 2-10. <http://dx.doi.org/10.1016/j.ecosys.2011.09.001>

- Dobryakova, M. and Froumin I. (2010) 'Higher engineering education in Russia: incentives for real change', *International Journal for Engineering Education*, vol. 26, no. 5, pp. 1032-1041.
- Education, Audiovisual and Culture Executive Agency (EACEA), (2012) *Higher Education in Kazakhstan*, Brussels: EACEA Publications.
- European Higher Education Area (EHEA), (1999) *The Bologna Declaration of 19 June 1999*, Bologna: EHEA Publications.
- Enhancing Capacities on Implementing of Institutional Quality Assurance Systems and Typology of Using Bologna Process Principles (IQAT), (2015) *About the project*, [Online], Available: <https://www.project-iqat.eu/about-the-project> [23 March 2017].
- Hoen, H.W. and Irnazarov, F. (2012) 'Market reform and institutional change in Kazakhstan and Uzbekistan. Paradoxes and prospects', in Ahrens, J. and Hoen, H. W. (eds), *Institutional Reform in Central Asia. Politico-economic challenges*. Central Asian Studies, no. 27, Routledge, London / New York, pp. 21 - 42.
- Kazakh Agro-Technical University named after Saken Seifullin (KazATU), (2016) *About the University*, [Online], Available: <http://kazatu.kz/en/about-the-university/facts-and-figures/> [28 Feb 2017].
- Kazakh National Agrarian University (KazNAU), (2015) *Kazakh National Agrarian University. Yesterday. Today. Tomorrow*, Almaty: KazNAU Publications.
- Kazakh National Agrarian University (KazNAU), (2016) *Rating of the University*, [Online], Available: [http://www.kaznau.kz/page/strategiia/?link=universitet\\_reitingisi\\_463&lang=en](http://www.kaznau.kz/page/strategiia/?link=universitet_reitingisi_463&lang=en) [28 Feb 2017].
- Kukeyeva, F., Delovarova, L., Ormysheva, T. and Davar, A. (2014) 'Higher Education and Sustainable Development in Kazakhstan', *Procedia - Social and Behavioural Sciences*, vol. 122, May, pp. 152-156. <http://dx.doi.org/10.1016/j.sbspro.2014.01.1318>
- Maudarbekova, B., Mizikaci, F. and Dyusembinova, R. (2015) 'Development of the Internationalization Process in Higher Education of Kazakhstan', *Mediterranean Journal of Social Sciences*, vol. 6, no. 5, pp. 248-251. <http://dx.doi.org/10.5901/mjss.2015.v6n5s1p248>
- Nazarbayev, N.A. (1997) *The Strategy "Kazakhstan 2030"*, Official Site of the President of the Republic of Kazakhstan, [Online], Available: [http://www.akorda.kz/en/official\\_documents/strategies\\_and\\_programs](http://www.akorda.kz/en/official_documents/strategies_and_programs) [28 Feb 2017].
- Nessipbayeva, O. and Dalayeva, T. (2013) 'Developmental Perspectives of Higher Education in the Post-Soviet Countries (for the Cases of Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and Turkmenistan)', *Procedia - Social and Behavioural Sciences*, vol. 89, October, pp. 391-396. <http://dx.doi.org/10.1016/j.sbspro.2013.08.865>
- Obukhova, P.V., Guichard, J.-P., Baikenov, A.S. and Suleimenov, I.E. (2015) 'Influence of Mass Consciousness on Quality of the Higher Education in Kazakhstan', *Procedia - Social and Behavioural Sciences*, vol. 185, May, pp. 172-178. <http://dx.doi.org/10.1016/j.sbspro.2015.03.354>
- Suleimenova, K.I., Obukhova, P.V., Shaltykova, D.B. and Suleimenov, I.E. (2013) 'Post-transition period and quality of higher education: ways to overcome the crisis phenomena', *International Letters of Social and Humanistic Sciences*, vol. 8, pp. 49-56. <http://dx.doi.org/10.18052/www.scipress.com/ILSHS.8.49>
- Turumbetova, L. (2014) 'Changes in the System of Higher Professional Education in Multiethnic Kazakhstan due to Globalization', *Procedia - Social and Behavioural Sciences*, vol. 116, February, pp. 4889-4893. <http://dx.doi.org/10.1016/j.sbspro.2014.01.1044>