

Establishment of World Class Universities in Kazakhstan: Al-Farabi Kazakh National University and Nazarbayev University

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Abstract: Creation of world-class universities in countries which have not had them yet or enhancement of existing universities up to the level of research universities is a world wide trend because research universities play a key role in the global knowledge economy of the 21st century and are flagships in the development of higher education across the globe. In this study, we deal with issues concerning relation between reforms aimed at transforming higher education institutions into world-class research universities and granting autonomy to them. The above tendencies will be analyzed by comparing Al Farabi KazNU and Nazarbayev University. Kazakh National University N.A. Al Farabi is justly considered as one of the best higher education institutions of the country throughout its history. President Nazarbayev noted that KazNU N.A. Al Farabi is a trendsetter for the whole system of higher education it has successfully developed educational and scientific potential of the republic. To study in such higher education institution is a great privilege because it opens the way for receiving elite education. Delivering a lecture to students of Nazarbayev University the president noted that the university's experience of functioning as an autonomous institution should be extended to include other higher education institutions of the country.

Key words: Transformation, research university, creation of world-class universities, autonomy, comparative education

INTRODUCTION

Creation of world-class universities in countries which have not had them yet or enhancement of existing universities up to the level of research universities is a world wide trend because research universities play a key role in the global knowledge economy of the 21st century and are flagships in the development of higher education across the globe.

J. Salmi in his famous book "the challenge of establishing world-class universities" identifies three basic strategies that governments can follow to establish research institutions. The first strategy includes upgrading a small number of existing universities that have the potential of excelling (picking winners). The second strategy provides for merger of a few existing institutions and their transformation into a new university. Upon that it would achieve the type of synergies corresponding to a world-class institution (hybrid formula). Lastly, governments could create new world-class universities from scratch (clean-slate approach) (Salmi, 2009). The all three approaches have been currently applied in the modernization of higher education in Kazakhstan.

Al Farabi KazNU is in the process of transformation into a world-class university in accordance with the first and the second strategies. The university was established as a state university in 2010 it was assigned the status of a National Research University. In 2015, the university was granted autonomy. Over the last few years the structure of Al Farabi KazNU was changed and research institutes were merged in the university.

The creation of Nazarbayev University is an example of the third approach followed by the government of the RK. It is the first university in Kazakhstan enjoying academic freedom and autonomy. The university's autonomous status was granted by the Law of the Republic of Kazakhstan as of 19 January, 2011, "on the status of "Nazarbayev University", "Nazarbayev Intellectual Schools" and "Nazarbayev Fund" (Mohrman *et al.*, 2008).

MAIN TEXT

In this study, we deal with issues concerning relation between reforms aimed at transforming higher education institutions into world-class research universities and granting autonomy to them. The above tendencies will be analyzed by comparing Al Farabi KazNU and Nazarbayev University.

Table 1: The initial comparative analysis of Al Farabi KazNU and Nazarbayev University

Criteria	KazNU N.A. Al Farabi	NU
The establishment of the universities	On 20 October 1933 the government “Concerning training of personnel for Kazakhstan”. It provided for the establishment of the Kazakh State University N.A.S.M. Kirov based on the teachers’ training institution in the city of Alma-Ata (Mynbayeva, 2010). From 2010 onwards KazNU N. A. Al Farabi has been in the process of successful transformation into a world-class research university	The autonomous organization of education “Nazarbayev University” was created at the initiative of president of the Republic of Kazakhstan Nazarbayev. Under the decree of the government of the RK N 957 as of 20 June 2009 the non-commercial joint-stock society “The new university of Astana” was created. The 100% of its charter capital was contributed by the Government. In accordance with the decree of the government N 532 it was renamed as JSC “Nazarbayev University”
The governing bodies of the universities	The academic council of Al Farabi KazNU is a consultative body. Its activity is based on the principles of openness, collaborative discussion of issues within its competency. Al Farabi KazNU introduced corporate management. Supervisory board was established in the university	The supreme board of trustees is headed by the president of the Republic of Kazakhstan. On 24 April 2013, the new executive body of the university, managing council was formed by the decision of the board of trustees of Nazarbayev University. NU has set up a collegiate governance structure beginning with the university management, academic and research councils. In addition some specific committees are being set up and faculty has organized faculty senate
Financing	Sources of financing in 2011-2014 were as follows: budgetary funds 65%; extra-budgetary funds 19%; public-private partnership 3%; scientific research 13%	NU is supported mainly through the government budget. Gradually, the university will reduce this dependency by attracting other sources of financial support, including contributions to the university’s endowment, the Nazarbayev Fund, international and local research grants and tuition fees (http://nu.edu.kz/)
Recruitment of personnel	At KazNU N.A. Al Farabi recruitment of academic staff is competitive. The transparency of the recruitment process is ensured by a contest committee. The focus is on professional qualities, knowledge of languages, level of scientific research. Preference is given to graduates of KazNU. Recruitment is based on full-time employment	NU strives to promote the best hiring practices, to allow the faculty to make the most of their talents and to assure appropriate rewards. Nazarbayev University has nowadays faculty members from the USA, Great Britain, Canada, Germany, Australia, Italy, Japan, France, the Netherlands, Singapore, etc. The largest number of them are from the North America (>40%), Kazakhstan (>20%), Western Europe (>17%), Asian countries (>10%)
Admission of students	KazNU admits citizens of the RK, foreign citizens and stateless persons with general secondary and higher education. Enrollment is carried out separately with regard to specialties and languages of instruction. The applicant shall score at the unified national test/complex test for applicants higher points than the threshold of 70 points to be enrolled beginning from 2012. The social package is available for students of certain categories	In order to be admitted to the university students shall pass a set of rigorous examinations established at the request of one of the partners. According to the statistics about 500 graduates from high school are enrolled to the university each year. In 2013-2014, the state allocated 500 grants for studying at the Centre for Preparatory Studies of Nazarbayev University. The language of instruction at the university is English
Student engagement	The committee of youth organizations of Al Farabi KazNU is a union of all student organizations and clubs, it is included into the structural subdivision of the university called the office of work with youth organizations. The system of curators-advisers exists at the university	There are >80 student organizations and clubs at the university. They cover various areas of intellectual development, research, creative work, entertainment, culture, arts and sports. There is the career and advising centre for students at NU
Cooperation with other	Today Al Farabi KazNU successfully cooperates with 420 biggest universities in the world. From 2010 based on the higher education institutions Memorandum of French-Kazakhstani Partnership with the National Polytechnic Institute of Lorraine joint training of Masters and PhD doctors is carried out, etc.	The partners of Nazarbayev University are the University of Cambridge, Carnegie Mellon University, Duke University, National University of Singapore, University College London, etc.
Educational programs of Baccalaureate	The educational programs from 2012 are as follows: education, humanities, law, social sciences economics and business, natural sciences, engineering and technology, agricultural sciences, services and others	In autumn of 2011 three undergraduate schools were launched: the School of Engineering, the School of Science and Technology, the School of Humanities and Social Sciences
Graduate educational programs	Educational programs of Al Farabi KazNU master degree are implemented in two directions: scientific-pedagogical and specialized. PhD doctors are prepared on 61 specialties	In addition to existing graduate programs the following schools were opened: the Graduate School of Business, the Graduate School of Public Policy, the Graduate School of Education, the School of Medicine
Innovations and scientification of production	Al Farabi KazNU has modern research and innovation structure. The university has 8 successfully functioning subsidiary state enterprises on the basis of the right of economic management, the Laboratory of Engineering, 4 institutions and 22 research centers of humanities and social sciences	In January 2012 President Nazarbayev put forward the initial concept of Innovation Intellectual Cluster (IIC). The IIC will be an important element for introducing innovations in the RK and the key system for commercialization of innovative results of research conducted in Nazarbayev University

Kazakh National University N.A. Al Farabi is justly considered as one of the best higher education institutions of the country throughout its history.

President Nazarbayev noted that KazNU N.A. Al Farabi is a trendsetter for the whole system of higher education it has successfully developed educational and

scientific potential of the republic (<http://www.kaznu.kz/>). To study in such higher education institution is a great privilege because it opens the way for receiving elite education.

Delivering a lecture to students of Nazarbayev University the president noted that the university's experience of functioning as an autonomous institution should be extended to include other higher education institutions of the country.

The university was established as a national brand which harmoniously combines Kazakhstani identity with the best international educational model and research practice. It is the first university in Kazakhstan, operating in accordance with international academic standards and guided by the principles of autonomy and academic freedom.

Table 1 contains the results of the initial comparative analysis of the development of the research universities in the Republic of Kazakhstan which are KazNU N.A. Al Farabi and Nazarbayev University.

The establishment of the universities: On 20 October 1933, the government of the USSR adopted the decree N 2293 "concerning training of personnel for Kazakhstan". It provided for the establishment of the Kazakh State University N.A.S.M. Kirov based on the teachers' training institution in the city of Alma-Ata-KazGU.

To implement the state policy of innovative development from 2010 onwards KazNU N.A. Al Farabi has been in the process of its successful transformation into a world-class research university (<http://www.kaznu.kz/>).

Under the decree of the government of the RK N 957 as of 20 June 2009 the non-commercial joint-stock society "the new University of Astana" was created. The 100% of its charter capital was contributed by the government. In accordance with decree of the government N 532 it was renamed as JSC "Nazarbayev University". The autonomous organization of education "Nazarbayev University" was created at the initiative of president of the Republic of Kazakhstan Nazarbayev. Autonomy and special legal regime were granted to the university under the law of the Republic of Kazakhstan dated January 19, 2011 "on the status of "Nazarbayev University", "Nazarbayev Intellectual schools" and "Nazarbayev Fund".

Management structure: The governing structure of a state autonomous organization across the globe is as follows: the highest governance body is supreme board of trustees. The executive body is sole executive and

collective executive. Other governing bodies stipulated by legislation and the charter of the organization are academic council, arts council, etc.

In order to comply with Article 11.1 of the labor code of the Republic of Kazakhstan and to raise the efficiency of governing Al Farabi KazNU the following structure was approved by the decree of the rector as of 2 November, 2012:

- Rector
- Academic council
- First pro-rector for academic affairs
- Pro-rector for research and innovation
- Pro-rector for economic and operational activities

The academic council of Al Farabi KazNU is a consultative body. Its activity is based on the principles of openness, collaborative discussion of issues within its competency.

Al Farabi KazNU introduced corporate management: the supervisory board was established in the university. It consists of 10 persons (<http://www.kaznu.kz/>).

NU has set up a collegiate management structure beginning with the university management, academic and research councils. In addition some specific committees are being set up and faculty has organized faculty senate (<http://nu.edu.kz/>).

Financing of the universities: In foreign countries the status of autonomous organization involves financial independence of a higher education institution with retention of budget financing. The university has the opportunity to obtain credits and independently manage its extra-budgetary funds as it deems fit. For instance, Al Farabi KazNU sources of financing in 2011-2014 were as follows: budgetary funds 65%; extra-budgetary funds 19%; public-private partnership 3%; scientific research 13%.

As it is stressed in the section "funding" of the "Strategy of Nazarbayev University for 2013-2020", NU is supported mainly through the government budget. Gradually the university will reduce this dependency by attracting other sources of financial support including contributions to the university's endowment, the Nazarbayev fund, international and local research grants, and tuition fees.

Personnel recruitment: The core of a research university is its faculty, committed to the idea of selfless service of science. Professors shall be well educated in order to carry out teaching and scientific activities at the highest level (Altbach and Salmi, 2012).

At KazNU N.A. Al Farabi recruitment of academic staff is competitive. The transparency of the recruitment process is ensured by a contest committee. The committee's focus is on professional qualities, knowledge of languages, level of scientific research.

Faculty recruitment policy of KazNU is aimed at hiring graduates of KazNU. As stated in the "Strategy of Nazarbayev University for 2013-2020", "success of any university is driven by the quality of faculty. One of the greatest challenges for NU is to build a faculty body of the highest excellence. Global competition among universities for the best academics has never been so high and will be increasing in the coming decade. Building the heart of university the faculty body will be very challenging for NU as it builds its reputation. NU strives to promote the best hiring practices to allow the international faculty to make the most of their talents and to assure appropriate rewards. NU is delivering on this commitment through a hiring process that is transparent, fair and thorough".

NU hires highly qualified academic staff from various countries of the world. Based on the Memorandum of cooperation signed between the graduate school of Business of NU (NU GSB) and the Fuqua School of Business of Duke University the latter determined the academic staff to teach at NU GSB. All faculty members are reputable scientists who more than once picked up awards for their research and teaching activities.

To select academic staff a contest committee is formed. It consists of senior faculty members including senior executives of the university, representatives of higher education institutions that are partners of NU and invited international experts (professors, scientists, specialists in the field of education and research, representatives of academic, scientific and business communities). The contest committee takes collegiate decision about recommending candidates for their employment by the university. Due to such recruitment system Nazarbayev University has nowadays faculty members from the USA, Great Britain, Canada, Germany, Australia, Italy, Japan, France, the Netherlands, Singapore, etc. The largest number of them are from the North America (>40%), Kazakhstan (>20%), Western Europe (>17%), Asian countries (>10%) (<http://nu.edu.kz>).

Admission of students: Al Farabi KazNU admits citizens of the RK, foreign citizens and stateless persons with general secondary and higher education. Enrollment is carried out separately with regard to specialties and languages of instruction. The applicant shall score at the unified national test/complex test for applicants higher points than the threshold to be enrolled (70 points).

The social package for students provides for a reduction of tuition fees by 10-25% for students getting excellent grades and for students from vulnerable social groups getting excellent and good grades. The social package provides for monthly cash aid to students-invalids, meal coupons for students who sickened of tuberculosis or have had it. The university helps students fill open positions as part-time employee of the service staff (<http://www.kaznu.kz/>).

In order to be admitted to Nazarbayev University students shall pass a set of rigorous examinations administered by one of NU's partners. Once admitted, students will continue to be challenged to sustain academic excellence in order to progress/retain academic eligibility at NU.

The university has created a student career development center that gives students access to potential employers, provides career guidance, conducts workshops on job search skills and helps students analyze their skills and interests to match them to the needs of the marketplace (<http://nu.edu.kz>).

Student engagement: For the universities it is important to get students involved in the university's life. Therefore, various organizations and unions are created for students. For instance, the committee of youth organizations of Al Farabi KazNU is a union of all student organizations and clubs it is included into the structural subdivision of the university called the department of work with youth organizations.

The system of curators-advisers exists at the university. The functions of curators-advisers are performed by 50% of the academic staff. In their activities they follow the principle of pedagogical supervision of students. There are councils of advisers at faculties. The school of curators-advisers functions on the basis of the department of general and ethnic pedagogics.

Nazarbayev University also promotes the development of an autonomous student government and a variety of student organizations. The faculty and staff of the university are engaged with these student organizations to ensure that the Nazarbayev University experience is the very best that it can be.

There are >80 student organizations and clubs at the university They cover various areas of intellectual development, research, creative work, entertainment, culture, arts and sports. There is the Career and Advising Centre for students at NU.

Cooperation with other tertiary education institutions: Cooperation with other higher education institutions is important for dynamic development of a university. Today

Al Farabi KazNU successfully cooperates with 420 biggest universities in the world. From 2010 mutual training of masters and PhD doctors has been carried out based on the Memorandum on French-Kazakhstani partnership with the National Polytechnic Institute of Lorraine. Joint double diploma programs are successfully implemented with Strasbourg School (France), Polytechnic University of Valencia (Spain), the Joint Institute for Nuclear Research Dubna (Russia), Tomsk Polytechnic University (Russia). Al Farabi KazNU was the first Kazakhstani tertiary education institution which began to implement joint double diploma educational programs within the frames of the SCO University and the CIS Network University (<http://www.kaznu.kz/>).

The partners of Nazarbayev University are the University of Cambridge, Duke University, University College London, University of Pennsylvania, University of Pittsburgh, University Wisconsin-Madison, partners in research field and others. The partners of the university take part in its creation and further development. The university meets the highest world standards in higher education and research being at that a unique Kazakhstani University.

Undergraduate programs of Baccalaureate: Autonomy of tertiary education institutions entails independent development of educational programs. In 2010, Al Farabi KazNU obtained the right to introduce grand-scale Pilot bachelor programs, this allowed the university to provide world class educational services (Mynbayeva, 2010).

Nazarbayev University from the date of its foundation has carried out its educational activities on the basis of independently developed educational programs and educational programs of its foreign partners it independently defines the procedures for student admission and the procedures for controlling academic progress of its students, it has the right to independently take decisions in financial-economic and administrative areas.

The schools of Nazarbayev University provide bachelor, master and PhD educational programs developed in partnership with leading world universities. In autumn of 2011 three schools with bachelor programs were launched at Nazarbayev University which opened their doors to the first graduates of the university preparatory programme. The schools are the school of engineering, the school of science and technology and the school of humanities and social sciences.

Graduate programs: At Al Farabi KazNU master and PhD educational programs are implemented in two directions:

scientific-pedagogical and specialized. The programs provide deep specialized professional training subsequently allowing alumni to be successfully engaged in research, administrative and expert activities. The directions of the above educational programs are the same as the directions of the bachelor programs (<http://www.kaznu.kz/>).

NU contributes to the development of graduate education. It opened four graduate schools in addition to graduate programs offered by the three initially established undergraduate schools.

Integration of science and education: According to the Law of the Republic of Kazakhstan “about science” as of 18 February 2011, research university is a higher education institution implementing the program of the development of the university and participating in the organization and implementation of fundamental and applied research and other scientific, technological and design works. The main task of the research university is integration of research activity and educational process on all levels of undergraduate and graduate education.

Al Farabi KazNU has modern research and innovation structure. The university has 8 successfully functioning subsidiary state enterprises on the basis of the right of economic management, the Laboratory of Engineering, 4 institutions and 22 research centers of humanities and social sciences (<http://www.kaznu.kz/>).

One of the most important directions of research activities is student research which is a powerful factor in improving the quality of training of specialists with higher education who are capable to creatively use technological advancements in their practical activity.

According to the requirement of the RK MES no less than 10% of students, magistrands and PhD students shall participate in funded R&D.

Nazarbayev University supports joint national and international research projects with the participation of foreign scientists and experts, scientists from Kazakhstan, living abroad, leading international research centres and national companies.

NU motivates its research workers to derive commercial benefit from results of their scientific research according to the principle of “three P publications, patents, products” by awarding prizes for each of the above components (<http://nu.edu.kz/>).

In January 2012, President Nazarbayev put forward the initial concept of Innovation Intellectual Cluster (IIC). The IIC main elements are: commercialization office, business incubator, prototyping center, technopark, research park and venture funds.

CONCLUSION

We have carried out initial comparison of the development of the research universities Al Farabi KazNU and Nazarbayev University. We would like to note that the universities enjoy academic freedom including independent design of their own educational programs, implementation of their own human resources policies, creation of supervisory boards, etc.

We do not claim that this research is complete because Nazarbayev University has gone a short way of its own development and it is difficult to determine if the universities are ready to be financially autonomous. We believe it important that Al Farabi KazNU authorities understand the significance of developing academic freedom while striving after autonomy.

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