IRSTI 06.81.23

# HIGHER EDUCATION IN KAZAKHSTAN: GLOBAL TRENDS AND STATE POLICY

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**Abstract.** Modern global trends in socio-economic processes, manifested in the progress of the "economy of knowledge, technology and information", have put on the agenda the issues of professional and personal growth and the need for investment in "human capital". Globalization and internationalization of education mean the gradual transformation of national educational systems into a global one while maintaining differences due to tradition and culture. This article analyzes the fundamental objectives of the state policy of reforming higher education in the Republic of Kazakhstan in the scope of global tendencies in education.

The object of the study is the system of higher education of Kazakhstan. The authors set the task to define the quality of conformance of higher hducation of Kazakhstan with such global trends in the field of university education as internationalization, digitalization and "education through life". To this end, official documents of the Ministry of Science and Higher Education, analytical reports, statistical materials, as well as foreign and domestic studies on the problem were studied. Comparative and system-functional research methods have revealed the efficiency of the implementation of the core global trends in education in the state policy of reforming university education.

Keywords: higher education, Kazakhstan, state policy, global trends, digitalization, long-life learning.

#### Introduction

Nowadays, global changes are taking place so rapidly that it is difficult to predict what knowledge, skills and competencies the modern generation of young people will need to possess. Education is the most important factor influencing social processes because it affects the assimilation of advanced technologies and forms a system of value orientations. The value of education increases in all aspects of life. Education in the era of globalization is the sphere where an emerging specialist is introduced to global values and expands their horizons and knowledge regarding not only professional competencies but also working conditions that can be provided to them in various countries of the world. All over the world, they are striving to improve and modernize the education system so that it meets the requirements of today as best as possible.

In different states, transformations are carried out in different ways, considering the specifics of the needs, the level of development of the country, national traditions, and education. But the main tendencies that are noticeable all over the world are 1) the democratization of education; 2) the increasing of the fundamental nature of education; 3) the humanization and humanitarianization of education. Higher schools in foreign countries have been formed for many years. Several countries have carried out reforms in the field of education at the initiative of the Governments of these States considering the requirements of the current level of development of the world community and the breakthrough on science and technology to improve the quality of the education system in recent decades. Higher education abroad is assigned the role of accumulation, development and dissemination of knowledge, cultural and educational mission.

Kazakhstan fulfils its social obligations to ensure equal access to higher education. The issue of ensuring access to quality education is raised at the level of the country's leadership, which assigns education the mission of the national idea of security. Ensuring access and equality in higher education is a top priority for the next five years of the country's strategic development. This task is included in the National Development Plan until 2025, which is aimed at "levelling the aftermath of the COVID-19 pandemic and developing factors to accelerate economic growth for a more sustainable and inclusive economy." At the higher education level, this task includes 1) support for socially vulnerable categories of citizens and young people from low-income families; 2) life-long education (introduction of alternative options for non-formal education, "silver universities", etc.) One of the problems of reforming the system of modern education is its inclusion in a single global educational space to preserve society and national culture based on dialogue.

#### Literature review

The Higher Education system operates in a system of interconnected global and national levels.

Researchers note at least three general global trends: the growth of higher education systems with a high level of participation, primarily due to social rather than economic factors; the spread of research potential and "World-class universities" (WCU) within the framework of a unified world scientific system; and quasi-business organization (Marginson, S., 2016). The manifestation of these trends varies due to national and regional special aspects of the development of the political system and socio-cultural space.

Researchers from the Institute of Educational Technologies of the Open University (UK) and the Laboratory of Artificial Intelligence and Human Languages of the Institute of Online Education (China) have prepared a report on educational trends shaping the global educational environment in 2021 (Global trends in education in the Russian context, 2022).

Kazakhstani scholars note in their research the specifics of global trends in the Kazakh system, for example, Svyatov S., Skiba M, Sadyhanova G.A., Zhakypova F., Sagyntaeva A., Sarsenbayeva A. and other authors (Svyatov S., Skiba M., 2019). In the studies of foreign academicians on the problems of global trends in education, such aspects as lifelong learning for sustainable development are considered, an aspect that is rarely explored in great detail. An important global trend in education is the commercialization of education through the expansion of private universities. This problem is also the subject of research on the problems faced by governments in financing higher education and as well as various aspects of the problem of lifelong learning (Walter Leal Filho, Mark Mifsud, Paul Pace, 2018).

### Methodology

The source base of the study is represented by official sources of information on the implementation of the state educational policy in the field of higher education in the Republic of Kazakhstan (state programs, national reports, national and foreign accreditation agencies, etc.), as well as analytical reports of the OECD. For example, the practice of preparing and publishing an annual National report on the state and development of the education system of the Republic of Kazakhstan was highly appreciated by OECD experts as evidence of transparency in the management of the education system in the country (Education Policy Outlook Kazakhstan, 2018).

Statistical data of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan were analyzed to identify quantitative and qualitative indicators of Kazakhstan's higher education system. The available data allowed us to determine the number of Kazakhstani universities by status and form of ownership, the number of students in gender and age sections, the number of educational grants, etc. The official websites of the Ministry of Science and Higher Education and the Government of the Republic of Kazakhstan contain valuable information. Thus, USMHE (Unified system of management Higher Education) has accumulated information on more than 8000 educational programs of higher and postgraduate education (Unified Higher Education Management System, 2022).

### **Results & Discussion**

After 1991, the state policy of Kazakhstan in the field of education was carried out in the direction of reforming the legislative framework, the system of management and the financing of education in the context of the task of qualitative transformation of the education system. The reform of higher education in the Republic has been carried out most intensively since 1995. The basic principles of Kazakhstan's educational policy are defined by the Constitution of the Republic of Kazakhstan, the Law of the Republic of Kazakhstan "On Education", the Strategy "Kazakhstan-2050: a new political course of the established state" 2012. In the system of state strategic planning, the main document was the newly adopted State Program for the Development of Education and Science for 2020-2025.

The following basic principles of the state policy in the field of education in the Republic of Kazakhstan are listed as follows:

• equality of the rights of all to receive a quality education;

• priority of the development of the education system;

• accessibility of education at all levels for the population, taking into account the intellectual development, psychophysiological and individual characteristics of each person;

• secular, humanistic and developmental nature of education, the priority of civic and national values, human life and health, and free personal development;

• respect for human rights and freedoms;

• stimulating the education of the individual and the development of giftedness;

• continuity of the education process, ensuring continuity of its levels;

• unity of education, upbringing and development;

democratic nature

• of education management, transparency of the education system;

• diversity of educational organizations.

The State Program for the Development of Education and Science for 2020-2025 is based on five main directions and 11 key tasks: from ensuring the high status of the teaching profession to improving the effectiveness of scientific research and ensuring integration into the world scientific space. The program is designed to ensure the development of the education and science system to increase its competitiveness and bring it closer to the best practices of the OECD countries.

In modern conditions of globalization and internationalization, universities not only provide high-quality education that responds to the needs of the market and the demands of employers but is also called upon to become centers of scientific research and innovation. By 2022, 7 universities have already been transformed into research universities

As of 2022, there are only 128 higher educational institutions in Kazakhstan after the reduction carried out in 2020. The share of national universities is 8.59%, international - 3.13%, state universities - 3.13%; autonomous universities - 6.25%, noncitizen universities -3.12%. According to the forms of ownership, 35.94% are joint-stock universities, and 39.84% are private. Most of the universities in Kazakhstan are private (Fig.1) (Global trends in education in the Russian context, 2022). At the same time, the number of private universities shows a downward trend. The reduction in the number of universities in Kazakhstan is not an end in itself, but rather the result of the work of the Ministry of Science and Higher Education to improve the quality of higher education. These measures will help to avoid devaluation and discredit of the higher education system.

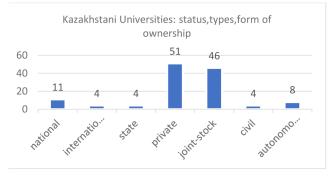


Figure 1 – Distribution of universities by status, types and form of ownership Source: Unified system of management of Higher Education (MSHE)

In the territorial context, the distribution of universities is as follows:

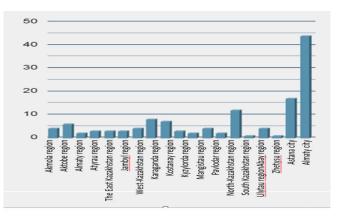


Figure 2 – Distribution higher education organizations by location Source: MSHE

According to the World Bank, the coverage of higher education in Kazakhstan is quite significant and amounts to 62% (World Bank, 2022). This indicator is comparable with such countries as Georgia (64%), Italy (64%), Poland (69%), Portugal (66%), and is inferior to Russia (85%), Hong Kong

(81%), Germany (70%) and other states (Fig. 3). The relatively high rate of higher education coverage provides the country with the first place in the indicator "Coverage of 25-34-year-olds with higher education" by the "Knowledge" factor in the IMD rating of competitiveness in the digital environment.

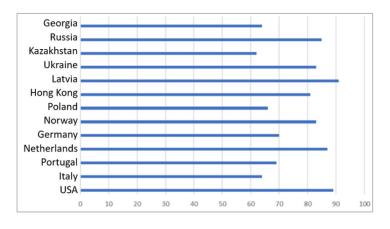


Figure 3- Coverage of the population with higher education in Kazakhstan Source: World Bank

Kazakhstan's higher education has transformed from elite to mass. This was facilitated by the segregation of the UNT for admission to universities, an annual increase in the state educational order, an increase in the number of scholarships, etc. The diversification of the student body was the result of expanding access to higher education. The global trend in expanding access and equality of higher and higher education is the involvement of people with low socio-economic status to receive it. Higher education contributes to the socialization of the individual, helping him to contribute to the social, cultural and environmental development of society.

Significant measures are being taken in Kazakhstan to expand the participation of all population groups in higher education, including applicants from families with low socio-economic status, rural areas, migrants, etc. Socially vulnerable students studying under the quota make up 11.5% of the total number of students. Rural youth is the most represented in the structure of socially vulnerable students studying under the quota (88.8%). Among other socially vulnerable categories studying under the quota, the contingent of students is represented by students of Kazakh nationality who are not citizens of the Republic of Kazakhstan (3275), students who are orphans and left without parental care (2761), disabled people (1349).

The creation of conditions for inclusive education remains a priority direction of the State Educational Program for 2020-2025 at all levels of education. In 2020, the share of civil universities that created conditions for inclusive education amounted to 15%, and in total, the state educational order for training personnel in universities for the 2020–2021 academic year amounted to more than 68 thousand grants.

Another global trend is observed in the higher education system of Kazakhstan — gender equality. 53.2% of girls and 46.8% of young people study at universities. At the same time, in the context of training areas, feminization is observed in the following areas of training: "Social Sciences, journalism and information" - 79.1%, "Pedagogical Sciences" - 69.8%, "Natural Sciences, Mathematics and Statistics" — 68.1%, "Healthcare" — 63.4%. On the contrary, the predominance of male representatives is typical for educational programs on national security and military affairs (80.5%), engineering, manufacturing and construction industries (71.3%), and information and communication technologies (70%). Gender equality is observed in the areas of training "Business and Management", "Services", and "Agriculture and bioresources" (National report on the state and development of the education system of the Republic of Kazakhstan, retrieved from 2022) (Table 1):

Groups of educational programs	Total students	Female students
Pedagogical Sciences	92468	64556
Arts and Humanities	17251	12243
Social Sciences, journalism and information	10021	7930
Business, management and law	62424	29958
Natural sciences, mathematics and statistics	11381	7750
Information and communication technologies	26324	7880
Engineering, manufacturing industries	56571	16240
Agriculture and bioresources	4211	2084
Veterinary	2529	1079
Services	16380	8271
Healthcare	16239	10290
National security and military affairs	2404	468
Total population	576557	306799

**Table1** – The number of students in Kazakhstan by gender, 2020, peopleSource: Bureau of National Statistics ASPIR

Informatization and digitalization became especially relevant global trends in education during the pandemic. The COVID-19 pandemic gave a powerful impetus to the development of education with digital content, namely the emergence and updating of a huge number of educational programs and online courses. The experience of distance education around the world has generated new educational trends. In Kazakhstan's higher education during the pandemic, 84% of students remained on distance learning, and 12% had the opportunity to study full-time and/or combined. The full-time format was available for medical students, and the combined was available for first-year students: 70% of classes, industrial training and practice were offline, and 30% — were remote (National report on the state and development of the education system of the Republic of Kazakhstan). According to the degree of efficiency and effectiveness of the transition to the distance format, international experts classified Kazakhstan as a country with educational content and resources but not actively using them in the daily learning process. It means that the country initially had the potential to introduce distance learning. At the same time, Kazakhstan, along with some other countries of the world, had to urgently develop additional online training content, introduce online tools and train teachers and students to interact remotely.

The online courses should be an additional opportunity to replenish the professional piggy bank or a new (parallel) individual's development. This trend partially relates to continuous learning and digitalization.

Digitalization of the educational services sector in the Republic of Kazakhstan began in 1997 with attempts to automate the field of education, including through the dissemination of online learning. However, for a long time, there was an urgent need to define the role tasks and responsibilities of the involved participants in the process of digitalization in the spheres of public life. Considering this circumstance and due to the great importance of digitalization, the State Program "Digital Kazakhstan" was approved on December 12, 2017, for the competitiveness of the country. According to it, digitalization is intended to become the infrastructural and technological basis for optimizing and accelerating educational policy.

Blended learning is used ("Extended learning") is an educational process based on the integration of various forms of learning (online training, offline training, and face-to-face training) aimed at developing and improving the professional competencies of the listener.

The main objectives of blended learning in the professional development system:

- development and implementation of relevant educational programs for advanced training that meet the modern requirements of educational policy, and innovative processes in education;

 introduction of distance learning technologies in the process of professional development of teaching staff;

 provision of high-quality educational services in the programs of additional education of teaching staff;

- creating favorable conditions for the training of students and increasing the resource efficiency of the educational process.

In the process of informatization and "digitalization" of education, there are also difficulties in the Republic of Kazakhstan. One of the main obstacles is the insufficient equipment of

teachers and students with computers and laptops. The second obstacle is access to the Internet and coverage of the necessary information and educational resources: blended learning also has disadvantages faced by all parts of the education system interested in the introduction and use of modern technologies. "According to IQAA research, in addition to interruptions in the operation of platforms, there are also problems such as the lack of necessary technical equipment for teaching staff and students, as well as their insufficient knowledge of PCs." (Zainiyeva L., Abzhapparova A., 2022). These are uneven IT literacy, dependence on technology, broadband Internet, stability of online mode and unlimited tariffs, insufficient level of technology ownership, etc.

As the experience of the teaching staff of Al-Farabi Kazakh National University shows during the transition to distance learning in the conditions of a pandemic, educational and scientific activities did not stop, since the university had previously used distance education technologies. Classes were held in a remote format using the "Univer", and "Moodle" systems with MOOC integration. The key problems faced by the university include:

1) Psychological difficulties. Despite the high professionalism in the offline format, it was difficult for some teachers to reorganize and conduct online classes.

2) Digital content and teaching methodology turned out to be unsuitable for distance learning. After the pandemic, it is necessary to reconsider the approach to the full-time education format in favour of blended learning, so that the training IT elements are organically integrated into different educational programs.

One of the main trends of modern education is life-long learning, or continuous learning, which provides the opportunity to realize the right to education throughout life. The fundamental principles of the concept were formulated in the United Nations 2030 Agenda for Sustainable Development. The UN Program calls on countries to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations Framework Programmes for Development Cooperation).

Even though the concept of "continuing education" was first formulated in 1968 in the materials of the UNESCO General Conference, the active development of framework documents in the European Union began in 2000-2018. Several documents have been adopted and approved, such as the Memorandum of Continuing Education of the European Union, the Qualifications Framework of the European Higher Education Area, the Paris Communique of 2018, etc.

In the post-Soviet space, the Republic of Kazakhstan is one of the leaders in the field of higher education reform and has a national qualification framework that covers all qualifications of higher and vocational education.

Following the Decree of the Government of the Republic of Kazakhstan dated July 8, 2021, No. 471 "On the approval of the Concept of lifelong learning, a system of independent assessment and recognition of qualifications is being actively developed, which is the most important indicator of the effectiveness of continuing education. Resolution of the Government of the Republic of Kazakhstan dated July 8, 2021 No. 471 "On approval of the Concept of lifelong learning (continuing education)".

The need for continuing education forms from the demands of adapting a modern person to the conditions of a rapidly changing world and a developing labour market, goods and services. Along with the market, the requirements for knowledge, competencies, and forms of communication of a modern person, the development of such properties as mobility, rapid adaptation, purposefulness, responsibility, result orientation, independence, diligence and self-development are also changing.

The implementation of the state policy of lifelong education or lifelong learning is designed to provide modern people with competencies that allow them to respond painlessly to any changes of a socioeconomic nature, helping to build an algorithm of actions taking into account the changed situation, be ready to acquire new skills and master new knowledge. This approach is designed to provide a person with reliable competencies that allow him to remain in demand throughout his active life and not join the ranks of socially vulnerable categories of the population.

The modern world of high technologies and digitalization has significantly changed the traditional understanding of the qualification of personnel as specialists in a certain field of activity. Specialists were trained by universities, and the qualifications obtained in the process of special vocational training did not require additional confirmation. Currently, the qualifications of personnel are subject to complex requirements, including not only professional education, but also the possession of soft skills that help to solve life problems and work in a team. Emotional intelligence, sociability, empathy, creativity, analytical thinking, personal effectiveness, self-development, striving for new knowledge, easy learning, etc. become qualities of higher priority for employers.

The traditional understanding of qualifications as special knowledge and special skills to perform a certain job remained a requirement of yesterday. Currently, multifunctionality, the ability to re-profile, and readiness for new complex responsibilities is the main requirement, which caused the need for lifelong learning. It is possible to study independently or develop such qualities, but it will take more time and effort. For these purposes, national models of lifelong learning or lifelong learning, the idea of professional development and personal growth are being developed.

The presence of many interpretations of the concept of "permanent education" in the scientific literature is a consequence of the functioning of various models of higher education and the infrastructural features of their implementation. Therefore, more than 20 different definitions of permanent education are used, such as "continuing education", "lifelong education", "permanent education", "recurrent education", "adult education", "further education", "postgraduate education" (post-graduate education), compensatory training (remedial education), etc. In total, here were about twenty of them in total (United Nations Framework Programmes for Development Cooperation). However, the presence of variable definitions and approaches in the implementation of the concept of permanent education does not contradict its main goal and the results of its achievement. All over the world, the program is aimed at solving the problem of adaptation to the conditions of market competition and integration into the global space.

Improving the education system, taking into account the quality of international policy, is also a strategic goal in the field of education of the Republic of Kazakhstan. The requirements for the competence and qualification of specialists are increasing from year to year, as close as possible to the world with a high quality of education. The concept of continuous education in the Republic of Kazakhstan is aimed at the implementation of world standards for the quality of education. Therefore, "changes in technological processes and the emergence of new occupations require absolutely new skills and qualifications of the workforce, which, accordingly, dictates the need, in addition to improving the system of training young personnel, the development of continuing education to improve the skills of the current workforce" (On the approval of the Concept of Lifelong learning (continuing education)").

The site "enbek.kz" of the Ministry of Labor and Social Protection of the Population of the Republic of Kazakhstan provides information and data on the experience of implementing a lifelong learning program. In 2021, short-term online courses were launched on the portal of the Center for Human Resource Development. The courses had the main goal of forming the so-called "soft skills", teaching new skills that are in demand in the modern labor market. The resource integrated the adult population aged 16-65, and covered the participation of both the younger generation, for whom there were courses to improve the level of education, professional skills, career opportunities, as well as the elderly population.

According to the PIAAC survey, the participation rate of the adult population (16-65 years old) in nonformal education was 17%. At the same time, the participation rate for women was 20%, and for men -13.85% (OECD, 2022).

The Silver Universities program is implemented within the framework of the Lifelong Education Concept, being an obligatory part of its implementation.

According to statistics, the generation of the "silver age", generation 60 plus, makes up 13.17% of the 7.6 billion world population, which is growing rapidly year by year. In Kazakhstan, the elderly population makes up 11% of 19,666,840 people (OECD, 2022). The trend of increasing the number of the elderly population in the world inevitably raises the question of the integration of this part of the population into an active socio-political process, and the inclusion of the social asset of society.

In the "State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020-2025" and on its basis, the developed "Roadmap for the Development of Continuous Education in the Republic of Kazakhstan until 2025", for the first time, the need to create silver universities was indicated. Universities of the "third age" is an international movement called U3A (from English). As a first experience, 72 universities of the Republic of Kazakhstan are developing a draft program "Silver University". Organizational structures have been created to regulate the learning process of older people. University named after L.N. Gumilev implements educational programs "Silver University" for the elderly on the basis of the Institute for Advanced Studies and Additional Education. The program includes language courses for communication and travel, law, history, cultural studies and art history, health programs, developing new directions. Another university that has actively launched the program is the IT University, where Silver IT University courses are offered free of charge. With the support of the state program "Digital Kazakhstan", a comprehensive program is being implemented - "Digital Technologies i-Evolutions",

which includes four areas, one of which is the "Silver IT" University, an educational program for the elderly. The program aims to increase the digital literacy of the population and is implemented by the Faculty of Information Technology of the University.

The Silver University project in Kazakhstan is not yet large-scale and comprehensive. The urban population is actively involved in the process. The countryside is lagging far behind, although the demand for them will increase.

## Conclusion

Thus, the modernization of higher education in Kazakhstan is aimed at the entry of universities of the Republic of Kazakhstan into the global educational space. Global challenges are objectively changing the education system of our country. The state policy in the field of education of the Republic of Kazakhstan is aimed at the qualitative modernization of education at all levels. Kazakhstan adheres to world standards in the implementation of quality education. The availability of education for the entire population, the continuity of levels, the introduction of advanced educational technologies, the provision of academic freedom to educational institutions, the expansion of the scope of educational services, the improvement of educational and research programs have become the fundamental principles of higher education in Kazakhstan.

As recommendations for further improvement of the higher education system of the Republic of Kazakhstan, the following can be indicated:

• compliance with the cost of the quality of educational services provided in universities

• develop Kazakhstan's opportunities in the world market of educational services to attract new foreign students, become competitive in the world market of educational services

• increasing the training of polyvalent specialists who quickly adapt to market fluctuations and are ready to solve various tasks within the framework of their activities

• improving the infrastructure of individual universities — providing free access to the Internet, computerization, creation of Internet platforms, respectively, the widespread use of mass online courses, digital interactive training programs, etc.

• stimulation and promotion of the English language as a way of integration into the global educational community.

• introduction of effective foreign models of integration of science and education, giving consideration to the national uniqueness of the country

• modernize approaches to the educational process in universities to improve positions in international rankings.

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