

Aigerim Kosherbayeva, Ardak Alipbek, Rinad Kosherbayev, Aknyr Baimahova, Albina Niyazova

Effective Ways of Modernization and Internationalization of Education in Kazakhstan

Abstract

This paper examines the problem of modernization of the national education model, based on the program documents *Mangilik El* and *Rukhani Zhangyru*, the project *New humanitarian knowledge: 100 new textbooks in the Kazakh language*, *Daryn* programs, etc., aimed at the spiritual development of the nation. One of the ways to internationalize education in Kazakhstan is the participation in *QS World University Rankings*, which highlights the top five universities: Asfandiyarov Kazakh National Medical University, Satbayev University, Al-Farabi Kazakh National University, Gumilev Eurasian National University, and Nazarbayev University. In addition to the five universities described, nine more, highlighted in the QS subject rankings, deserve attention. Among these universities is Abai Kazakh National Pedagogical University, which implements educational programs in teaching professions developed jointly with foreign partners. The review also covers the following path of modernization of education in Kazakhstan, which takes place in preschool and school education. Since 2009, Kazakhstan has been actively participating in international PISA studies, the results of which have contributed to the implementation of important educational initiatives implemented in the country. The study of such experience contributed to the design of a scientific study on the topic *Theory and technology of a comprehensive psychological and pedagogical assessment of the developing potential of the school's educational environment using the international SAKERS (modified version)*. The quality of school life and educational outcomes of students directly depend on the comfort of the school educational environment, in addition, the problem is aggravated by the risks and threats of globalization and changes in the modern world. The international SACERS (School-Age Care Environment Rating Scale) tool allows for the assessment and measurement of the educational environment according to 7 criteria: the internal space and furniture of the school; health and safety; active activity and pastime; interaction; educational process; staff development; special needs for students with disabilities. At this stage, according to the project on measuring the educational environment using international scales, SAKERS (this term is used in Kazakhstan for SACERS) is conducted in 7 Kazakhstani schools, different in structure and location. The paper ends with strategies for solving problems regarding the orientation of the educational system of Kazakhstan to international cooperation.

Keywords: Kazakhstan, modernization of education, internationalization of education, quality of school life, educational outcomes, university rankings

Introduction

The current period of education development in Kazakhstan is characterized by significant reforms. The fundamental basis of the reforms is the national project *Quality Education “Educated Nation”* (Government of the Republic of Kazakhstan, 2021). The main goal of the project is improving the quality of education and student outcomes. At the same time, the education system of Kazakhstan is carried out in accordance with the *Concept of development of preschool, secondary, technical and vocational education of the Republic of Kazakhstan for 2023-2029* (Government of the Republic of Kazakhstan, 2023).

In 2017, in his program article on the future modernization of public consciousness, President Nursultan Nazarbayev noted: “I propose to draw the public’s attention to the history of our contemporaries, which can be demonstrated in 100 New Faces of Kazakhstan project” (Nazarbayev, 2017). It is important that the presentation of the program *Rukhani Zhangyru* and the works of classics of Kazakh literature took place at the world-famous London Book Fair in 2019. The event aroused great interest among British publishers, representatives of the academic environment and the readership. The presentation was attended by the heads of well-known publishing houses, the leadership of the British Council, journalists and literary agents. The project *New Humanitarian Knowledge: 100 new textbooks in the Kazakh language* was also presented here. Within the framework of this project, more than 18 best textbooks on history, political science, sociology, philosophy, psychology, cultural studies, economics and linguistics have been translated from English, French and Russian into Kazakh. According to these textbooks, video recordings of lectures have been made on the Open University platform, according to which students can independently study and develop knowledge.

One of the priorities for the modernization of the national education model is the training of intellectual personalities, young people who are able to take key positions in government, economics, science and culture. The implementation of the state program *Daryn* contributes to the activation of this work.

Currently, the teacher training system has been rebuilt on the basis of international standards; the teacher’s status and public image are being raised through the media, propaganda of the achievements of the best teachers, pedagogical skill contests, interaction with public organizations, parents and employers.

Thus, the reforms in the Kazakh educational system are supported by important state documents and are aimed at recognizing the country on a global scale.

Results and discussion

Kazakhstani universities in QS World University Rankings

One of the ways to internationalize education in Kazakhstan is the participation of universities in *QS World University Rankings*. According to *QS World University Rankings 2023: Top global universities*, the top five universities of Kazakhstan included:

- Kazakh National University named after Al-Farabi – 150th place in the world and 44th place in Asia;
- Eurasian National University named after Gumilev – 277th place in the world and 96th place in Asia;

- Nazarbayev University, which cooperates with the scientific centers of Cambridge and Pennsylvania within the framework of the School of Education programs, for the Business School – with Fuqua Business School of Duke, for the School of Public Policy – with Lee Kuan Yew School of Public Policy of the National University of Singapore;
- National Research Technical Satbayev University – ranks 443rd in the world and 177th place in Asia;
- Kazakh National Medical University named after Asfandiyarov is in the range of positions 651-700 places in the world and 301-350 in Asia.

In addition to the five universities described, QS identifies nine more universities. Among these universities is the Kazakh National Pedagogical University named after Abai, which implements educational programs in teaching professions developed jointly with foreign partners.

One more event should be noted: the President of the Republic of Kazakhstan Nursultan Nazarbayev (first president of Kazakhstan from 1990 to 2019) and the French President Francois Hollande opened the Sorbonne-Kazakhstan Institute in 2015. It is the second Sorbonne University worldwide after the French Sorbonne University and the only one in Central Asia. Today, Abai University is actively working to further improve the system of professional and pedagogical training of future teachers in the Republic of Kazakhstan.

Kazakhstani schoolchildren in PISA

The quality of education is the most important factor determining the long-term development of Kazakhstani society in all spheres of life, as well as the main competitive advantage of the state. Therefore, modernization is taking place in preschool and school education. But in this direction, everything is not so simple and this is an urgent problem.

Among the transformational processes of the school, it is important to note the participation of Kazakhstani schoolchildren in international studies of the Programme for International Student Assessment (PISA), which is conducted under the auspices of the Organization for Economic Cooperation and Development (OECD). Kazakhstan has been participating in it since 2009 and its indicators are different. In 2022, 15-year-old schoolchildren from 81 countries of the world took part in the PISA study; 33,000 students from Kazakhstan. Here are the indicators in comparison with 2018: among 81 countries, Kazakhstan ranked 46th in mathematics (54th in 2018), 61st in reading (69th in 2018), 49th in natural sciences (69th in 2018). There is a big difference only in the natural sciences: the indicator increased from 397 to 423 points. However, not high scores with math and reading. In mathematics, Kazakhstan rose by only two points – from 423 to 425. And in reading, it even dropped by one – from 387 to 386. Let's compare these figures with Singapore, which occupies a leading position: 575 points in mathematics, 543 in reading and 561 in science. Cambodia became the main outsider of PISA 2022 with the following indicators: mathematics 336, reading 329, natural sciences 347 (OECD, 2022).

Despite the global deterioration of PISA indicators after the start of the COVID-19 pandemic, experts note that Kazakhstan has managed to maintain indicators in solving mathematical problems and assessing reading skills, and has shown significant progress in natural sciences. This was noted by Ms. Elizabeth Fordham, Senior Advisor to the OECD Directorate for Education and Skills. According to her, Kazakhstan's

accumulated significant experience of participating in PISA and the effective steps being taken to improve the national education system may be interesting and useful for studying by other countries of Central Asia and the Caucasus.

The PISA results allow relevant institutions to reflect and work out such questions: why did the southern region of Kazakhstan fall behind in all three disciplines; why, the lower the cost of education and the worse the socio-economic situation, the lower the results; why are the capitals and the more urbanized north of the country in the lead, and the more agrarian south in the laggards? Other issues arise, for example, on the development of school culture. We devoted ourselves to this problem in 2022. A year later, a comparative study with Polish colleagues, which showed the peculiarities of the school culture of Kazakh and Polish schoolchildren, was published (Tłuściak-Deliowska, Dernowska & Kosherbayeva, 2023).

Comfortable schools in Kazakhstan

Kazakhstan's PISA results have contributed to the implementation of important educational initiatives being implemented in the country. One of the effective initiatives, in our opinion, is the organization and development of the educational environment of the school. Relying on international experience is very important in this regard. The study of such experience contributed to the design of a scientific study on the topic *Theory and technology of a comprehensive psychological and pedagogical assessment of the developing potential of the school's educational environment using the international SAKERS (modified version)*. The term SAKERS is used in Kazakhstan for SACERS (School-Age Care Environment Rating Scale). This project started in 2023. There are practically no such studies in the republic today, despite their relevance on a global scale. The task of the project is to develop a methodology, tools and mechanisms for assessing the educational environment, taking into account the peculiarities and mentality of Kazakhstani schools. According to the concept of the project, it is the environment, the internal and external space of the school, that has a significant impact on the educational results of students. These are factors such as strengthening the teacher's status, the introduction of updated curricula, the widespread use of digital solutions in the educational process, etc.

So, the quality of school life and the educational results of students directly depend on the comfort of the school educational environment, on every detail of it – from the noise insulation of the halls to the transformable furniture in the classroom. The problem is aggravated by the risks and threats of globalization and changes in the modern world. A review of domestic and foreign studies shows that the situation in the world has a significant impact on the personal, socio-psychological health of children and their motivation, becomes a factor of stress disorders and other negative manifestations (Braunack-Mayer et al., 2013).

In the conditions of a negative information background and real threats to the physical health of schoolchildren, the statistics of manifestations of violations of the social and psychological health of the individual in the form of depressive states, frustrations, increased anxiety, aggressiveness of the individual, reducing its resistance to various kinds of addictions and deviations are increasing. These manifestations directly affect the educational and cognitive activity of students, reducing its activity, organization, and consistency, which can negatively affect the quality of educational results. Of particular importance in the combination of these problems is the assessment

of the educational environment and the support of positive motivation, subjective well-being of school students, the preservation of their health as a set of potential and real human capabilities in carrying out their actions in society and interacting with people without deterioration of physical and spiritual condition, without loss in adaptation to the living environment.

The international SACERS tool allows for the assessment and measurement of the educational environment according to 7 criteria: internal space and furniture of the school; health and safety; active activity and pastime; interaction; educational process; staff development; special needs for students with disabilities.

Our task at the first stage of the study is to modify and adapt the scales to the conditions of Kazakhstani schools. By modifying the scales, our project team has taken the following principles as a basis:

- the principle of taking into account the regulatory framework, the nature of government documents;
- ethnic component, national mentality;
- the concept of *Zhaily mektep (Comfortable school)*.

Today, the study on the above-mentioned project to measure the educational environment of a school using the international SACERS tool is being conducted in 7 schools in Kazakhstan from different regions: the megacities of Almaty and Shymkent, a rural school in the Almaty region, schools in Aktau on the shores of the Caspian Sea, schools in one of the oldest cities of the country – Taraz. These are different schools in their subculture and location, so the results will be different.

Our attention is attracted by the school, which in the future will function according to the state project *Zhaily mektep*, i.e., a comfortable school (Kudaybergenov, 2023; Aimagambetov, 2018). According to this project, 401 schools are planned to be built in the country by the end of 2025. These are schools that take into account a safe educational environment for students, equipped with advanced technology, with separate blocks for senior and junior grades; barrier-free space for children with special needs; subject rooms of a new modification. The national project *Zhaily mektep (Comfortable school)* is aimed at solving the issues of shortage of student places, liquidation of emergency schools and three-shift education.

Conclusion

In the last decade, Kazakhstan's education has been undergoing modernization, the main idea of which is internationalization and integration into the global educational space. Kazakhstan's education system is focused on international cooperation. Four strategic directions are being developed to solve the problems:

- creation of a new professional development system;
- modernization of the content of professional development based on the best Kazakh and international experience;
- development of an innovative system of professional development for teachers of pedagogical specialties of universities and colleges;
- creating conditions for the effective functioning of a professional development system that ensures the quality of education.

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Prof. Dr. Aigerim Kosherbayeva, Kazakh National Pedagogical University named after Abay, Almaty. Kazakhstan

Assoc. Prof. Dr. Ardak Alipbek, South Kazakhstan State Pedagogical University named after U. Zhanibekova, Shymkent. Kazakhstan

Dr. Rinad Kosherbayev, National Center for Teacher Training "Orleu", Almaty. Kazakhstan

Aknyr Baimahova, Kazakh National Pedagogical University named after Abay, Almaty. Kazakhstan

Albina Niyazova, Kazakh National Pedagogical University named after Abay, Almaty. Kazakhstan

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