

ABSTRACT

of the dissertation by Nurali Kairanbayev on the topic:
“The development of the higher education system and science in the United Arab Emirates: achievements and challenges”
submitted for the degree of Doctor of Philosophy (PhD) in the educational program “8D02209 – Oriental Studies”

General description of the study. The dissertation is devoted to a comprehensive analysis of the formation, institutional evolution, and current development of the higher education and science system in the UAE. It examines the main stages in the formation of the national higher education model, mechanisms of state regulation, the development of the quality assurance system, and the transformation of the country’s leading universities into world-class research centers. Particular attention is paid to the interrelationship between educational policy, the internationalization of the academic environment, the development of scientific infrastructure, and the state strategy of transition to a knowledge-based economy.

Relevance of the study. In the context of globalization, accelerated scientific and technological development, and intensified competition among national education systems, higher education becomes a key factor in the socio-economic modernization of the state. For countries oriented toward the transition to a knowledge economy, the quality of human capital training, the development of research universities, the internationalization of the academic environment, and the integration of science with the innovation economy are of particular importance. In this context, the study of successful non-Western models of educational transformation is of not only theoretical but also practical interest.

The relevance of the topic is reinforced by the fact that Kazakhstan is also undergoing institutional renewal of higher education, striving to enhance the global competitiveness of its universities, develop scientific potential, and establish international educational hubs. Under these conditions, the experience of the UAE is of particular value as that of a state that, within a relatively short historical period, managed to move from the absence of a national university system to the creation of a network of universities represented in global rankings and actively integrated into the international academic and scientific space. The study of this experience is important not as an object of mechanical borrowing, but as a basis for critically informed comparative analysis and the adaptation of selected institutional solutions to the conditions of Kazakhstan.

The object of the study is the system of higher education and national science in the UAE under the conditions of globalization and the state’s accelerated transition to a knowledge economy.

The subject of the study is the process of formation, structural transformation, and internationalization of the higher education and science system in the UAE, including state educational policy, quality assurance mechanisms, and strategies for developing leading universities into world-class research centers.

The purpose of the study is to conduct a systemic analysis of the institutional, political-administrative, socio-economic, and cultural factors shaping the formation and development of the higher education and science system in the UAE, as well as to identify the specific features of state educational policy, accreditation mechanisms, and models for transforming leading universities in the context of a transition to a knowledge-based economy.

To achieve this purpose, the following **objectives** were identified:

To analyze theoretical approaches, as well as the socio-economic and historical-cultural prerequisites for the formation of the higher education and science system in the UAE.

To reveal the evolution of state policy and identify the main directions of structural changes in the UAE higher education system at the turn of the twentieth and twenty-first centuries.

To characterize the process of forming the national system of scientific research and innovation in the context of the UAE's transition to a knowledge economy.

To assess the mechanisms for developing the national system of quality assurance and accreditation of higher education programs in the UAE.

To investigate the strategies and practical experience of the leading UAE universities – United Arab Emirates University, Khalifa University, and the University of Sharjah – in implementing research models and enhancing global academic competitiveness.

The **research hypothesis** is that the strategy of higher education internationalization in the UAE ensured a rapid increase in scientific capacity and growth in the international competitiveness of national universities; however, at the same time, it created a long-term structural dependence of the system on foreign academic personnel, which constitutes the main limitation for the sustainable reproduction of a national scientific school and domestic human capital.

Methodological foundation of the study. The research is based on a qualitative explanatory design aimed at identifying the institutional mechanisms of development of the UAE higher education and science system and at producing conclusions significant for comparative analysis and adaptation of this experience in the context of Kazakhstan. The units of analysis are the national higher education and science system as a whole, specific universities and regulatory institutions, as well as educational programs and managerial practices.

The methodological framework of the study includes a set of complementary methods. First, a comparative-institutional analysis was applied, making it possible to compare university development models and the specific features of regulatory mechanisms within the UAE system according to such parameters as legal regulation, forms of state governance, practices of attracting foreign universities, and quality assurance mechanisms. This method made it possible to identify causal links between institutional decisions and achieved outcomes rather than merely describing them.

Second, the case study method was used in relation to the three leading universities of the UAE: Khalifa University, UAEU, and the University of Sharjah.

Their selection was determined, on the one hand, by their leading positions in the national system and, on the other hand, by their representation of different institutional models and emirates. This made it possible to examine how different trajectories of university development and research transformation are formed within one country.

Third, the study employed content analysis and the method of expert reconstruction, which is especially important given the limited openness of part of the data on the internal functioning mechanisms of UAE universities. The reconstruction of educational and research practices was carried out on the basis of official university websites, accreditation documents, analytical reports of international organizations, and institutional reporting. The triangulation of sources ensured additional verification and reliability of the conclusions obtained.

Fourth, a statistical-analytical approach was used to assess the macro-social and scientometric context of higher education and science development in the UAE. Based on data from SciVal, Scopus, Web of Science, and international ranking agencies, the study analyzed university publication activity, citation impact, international collaboration, and the degree of dependence of research capacity on foreign specialists. This approach made it possible to combine qualitative institutional analysis with an empirical assessment of universities' actual research performance.

The source base of the study is distinguished by its comprehensiveness and multilevel character. The work uses official legal, regulatory, and strategic documents of the UAE government, including national development strategies and documents in the field of higher education; materials from regulatory bodies, primarily the Commission for Academic Accreditation, as well as agencies of individual emirates; internal documents and analytical reports of the country's leading universities; and international scientometric databases and ranking data. This combination of sources made it possible to connect the macro-level of state policy with the meso- and micro-levels of university governance and academic practice.

The **scientific novelty** of the study is determined by the following provisions:

For the first time in domestic scholarship, a comprehensive institutional analysis of the evolution of the UAE higher education and science system was conducted as a distinctive model of an accelerated transition from a resource-oriented state to a knowledge economy.

The phenomenon of structural personnel dependence in the UAE academic sphere was conceptualized; it was shown that the intensive recruitment of foreign scholars, which ensured rapid growth in the international competitiveness of universities, simultaneously limits the formation of a sustainable national scientific school.

A set of the latest scientometric and statistical data on the leading UAE universities was introduced into academic circulation, which made it possible to objectively assess the dynamics of their research performance and the degree of their integration into the global scientific space.

The specific features of a hybrid national quality assurance system were revealed, in which accreditation mechanisms act not only as instruments of control but also as factors of institutional transformation of universities.

The mechanisms for transforming the national universities of the UAE into world-class research centers were systematized, and the elements of this experience with adaptation potential in the context of Kazakhstan were identified.

The **theoretical significance** of the study lies in expanding scholarly understanding of models of higher education modernization in non-Western countries, forms of combining global academic standards with national socio-cultural priorities, and mechanisms of the institutional formation of research universities under conditions of accelerated internationalization. The work contributes to the development of comparative education, Oriental studies, educational policy, and the theory of university governance.

The **practical significance** of the study lies in the possibility of using its results in the development of strategies for modernization and internationalization of Kazakhstan's higher education system. The conclusions of the work may be applied in the activities of the Ministry of Science and Higher Education of the Republic of Kazakhstan, research universities, analytical centers, and educational foundations in the formation of international educational hubs, improvement of quality assurance policy, development of university science, and construction of mechanisms for integrating education, research, and innovation.

Main provisions submitted for defense:

The accelerated development of the higher education and science system in the UAE is driven by the state's transition from a resource-oriented model to a knowledge economy and relies on the combination of rigid strategic coordination with a high degree of institutional autonomy of leading universities.

The large-scale internationalization of faculty and the active recruitment of foreign researchers became the most important factors in the growth of publication activity and international ranking advancement of UAE universities, but at the same time intensified structural dependence on external human capital.

The national accreditation system of the UAE evolved from a mechanism of basic control into an instrument of strategic enhancement of university quality and research capacity.

The transformation of higher education in the UAE is implemented through differentiated institutional models of university development, including classical national, specialized high-technology, and comprehensive emirate-based models.

Despite differences in missions and organizational configurations, the successful transition of UAE universities to research status is ensured by common mechanisms: a KPI-oriented system for evaluating academic labor, the interdisciplinary organization of research, active grant support, and international academic integration.

The UAE experience has high adaptation potential for Kazakhstan; however, its borrowing is possible only under conditions of deep localization and a shift in emphasis from external recruitment to the development of domestic scientific personnel.

Approbation and publication of research results. The main provisions of the dissertation were discussed at international scientific conferences, academic seminars, and round tables devoted to the modernization of higher education, the internationalization of universities, and the educational policy of Middle Eastern countries. On the topic of the study, one article was published in a journal indexed in Scopus (Q2), three articles were published in editions recommended by the Committee for Quality Assurance in Science and Higher Education of the Republic of Kazakhstan, as well as publications in conference proceedings.

Structure of the dissertation. The dissertation includes a list of abbreviations, an introduction, three chapters, each consisting of three sections, a conclusion, a list of references, and an appendix. The first chapter reveals the theoretical and methodological foundations of the study and the historical prerequisites for the development of the UAE higher education system; the second analyzes structural reforms, internationalization, the development of science, and accreditation mechanisms; the third examines the transformation strategies of the leading UAE universities and the possibilities of adapting their experience in Kazakhstan.