



INSTITUTIONAL RESEARCH IN HIGHER EDUCATION: HISTORICAL CONTEXT AND IMPLICATIONS FOR ECONOMIC DEVELOPMENT

G.M. Manarbek 

Al-Farabi Kazakh National University, Almaty, Kazakhstan

E-mail: Gulden.Manarbek@kaznu.edu.kz

Abstract. Purpose – this paper examines the historical development of institutional research (IR) practices and explores its relevance for strengthening data-driven quality management in Kazakhstani higher education. Methods - a conceptual framework combined with a systematic literature review, organizational models, and practices in IR and higher education analytics, with a focus on adapting these approaches to the Kazakhstan context. Findings – a bibliometric comparison of publications from the USA, Europe, England, and Central Asia shows substantial differences in scholarly attention to IR. The USA accounts for 4,750 publications (40.9% of the reviewed total), followed by Europe with 4,554 (39.2%), while England accounts for 18.9%. Central Asia contributes only 115 publications (1.0%), covering Kazakhstan, Kyrgyzstan, and Uzbekistan. These results suggest that IR remains at an early stage of development in the region. More detailed normalization, such as publications per institution or researcher, is proposed for future research. Drawing on the U.S. “combo office” model and existing practices at Nazarbayev University and KIMEP, the paper proposes pillars for developing IR capacity in Kazakhstan. Conclusions – developing institutional research capacity can strengthen evidence-based decision-making and data-driven culture, support continuous quality improvement, and help universities respond more effectively to a rapidly changing labour market.

Keywords: institutional research, higher education, quality management, quality education, data-driven decision making, economic development.

Introduction

The age of information and technological advancement has brought an abundance of data and information. The development of an analytical culture for data collection, analysis, and utilization is essential for implementing institutional research practices aimed at ensuring quality education. Using data to guide decisions and predict trends in education and the labour market is an effective way to improve and maintain the quality of educational services. The current management system in Kazakhstani universities necessitates significant reforms to enhance

Received 10.10.2025. Revised 13.08.2026. Accepted 31.08.2026. Available online 30.09.2026

*Corresponding author

competitiveness and align the education system with the evolving demands of the labour market.

The World Bank has warned that a combination of high debt, tighter financial conditions and weak growth is straining the global economy, with the war in Ukraine, climate change and rising geopolitical tensions compounding the pressure. In the World Bank's Talking of Development episode, Central Europe and Asia Chief Economist Ivalio Izvorski highlights the importance of education in Central Asia to promote long-term, sustainable, and inclusive growth trajectories that create dynamism (Cusolito, Ana Paula, et al., 2025). With the loss of knowledge and monitoring of the quality of education during the pandemic, negative changes worsened.

The development of the country's economy increasingly depends on education and science development. It is necessary to understand the direct impact of quality education on the economic and social development of the country. Today, there is a positive trend in Kazakhstan in terms of financial support for education and science at the state level. However, it is worth noting the accountability of universities in guaranteeing quality education and training competitive specialists for the labour market.

Development of the economy, the transformation of HEIs into non-profit organizations, the transformation of national universities into research institutions, reforms in the management of universities, increasing competition in the labour market, as well as changing demands of the external environment in an era of abundant information and data led to the issue of quality and quality management (QM) becoming the most important. For the last few decades, universities in Kazakhstan have been facing external pressures and high competition, considering marketisation, managerialism, performance-based evaluation and accountability for quality. Although HEIs in Kazakhstan implement external quality assurance (QA) procedures and promote QM through quality policies, accreditation, rankings, competitive government procurement and risk management systems, there is still a lack of internal quality assurance and data-driven decision-making procedures. Quality assurance measures/approaches realized by universities are fragmented and poorly interconnected.

National universities of Kazakhstan identified the issue of quality assurance and management as a key strategic task of management after the higher education system of Kazakhstan joined the Bologna process in 2010. Increasing pressure from various external stakeholders (employers, society, government, students) and recent government reforms to provide autonomy to organizations forced university management to reconsider how they manage and respond to external demands and changes based on evidence-based decisions.

The quality assurance process for stakeholders and society must be accompanied by increased efficiency in the use of data and short-term/ long-term decision-making by the university administration. Therefore, it is necessary to introduce data use practice integrating structural units of the university and move in the same direction. To effectively implement this experience, it is necessary to introduce advanced foreign practices - institutional research. In this regard, this paper explores the theoretical and historical development context of institutional research practices in universities.

Literature review

Higher education plays a central role in economic development by developing human capital, supporting innovation and research, and preparing graduates to meet changing labour market needs. As technological change, globalization, and economic pressures reshape societies, universities are increasingly viewed not only as providers of education but also as important drivers of productivity, competitiveness, employment, and social mobility (Salmi, J., 2015). These developments have placed higher education at the centre of national policy agendas, increasing the need for evidence-based approaches to understanding and strengthening its contribution to economic and social development.

Investment in higher education builds human capital, which in turn supports economic development. Agasisti, T., & Petrenko, O. (2024) studied the relationship between higher education (HE) and economic development in their literature review and identified key points and their implications. The first one is a growing recognition among economists, researchers, and policymakers of the crucial role of effective and efficient entrepreneurial universities and human resources in economic growth and development. The second is the contribution of higher education to the economic development of countries through creating high-skilled human capital, research and development, and university-industry collaborations and technology transfer. The scholars concluded that the quality of education,

particularly in STEM fields, and the number of graduates are positively correlated with economic growth and innovation. In the same manner, research positively impacts innovation distribution, which in turn can boost economic development (Agasisti, T., & Petrenko, O., 2024).

The scholars also identified disparities between developed and developing countries in the allocation of funding for research and innovation. In many developing countries, limited public funding for research and development constrains innovation. The literature further highlights the importance of efficiency (the optimal use of resources) and effectiveness (the achievement of intended outcomes) in higher education policies and practices. These findings reinforce the key concern of the current paper: the effective use of data and the ability of higher education institutions to translate data into actionable insights and informed decisions.

Pushpakumara et al. (2023) show that most implementation barriers are institute-, process-, or stakeholder-related and call for information-system solutions to support quality assurance, while Kataria and Rajput (2025) find that persistent gaps between students' expectations and perceived service quality remain a defining feature of the field.

Taylor, L. D. (2020) argues that data-driven decision-making in higher education can become shaped by neoliberal economic logics, so data use starts serving competition and resource capture rather than student success. The author explains it as the commodification of data: staff were expected to use "data-as-capital" to secure resources and support. The paper also finds that DDDM fostered market-like environments inside universities, increasing competition and weakening collaboration among those responsible for helping students succeed.

Analytics can improve evidence-based decision-making and resource management in higher education, but their effective use is limited by insufficient staff capacity and expertise, while concerns remain about privacy, surveillance, and inequality (Mahroeian, H., & Daniel, B., 2021).

Currently, HEIs in Kazakhstan practice ISO 9001 certification and international accreditation as quality assurance mechanisms (Kerimkulova, S. et al., 2017; Mukhatayev, A. et al., 2024; Manarbek, G., & Kondybayeva, S., 2024). Mukhatayev et al. (2024) report that Kazakhstani stakeholders view fragmented internal procedures and limited data use as the main barriers to effective quality assurance, and Manarbek G. et al. (2024) argue that internal institutional assessment, modelled on the U.S. peer-review experience, is essential for advancing Kazakhstan's quality management practices. Currently, quality assurance systems are implemented at the national level; however, implementation at the institutional level is essential for effective quality management procedures in higher education. Belkhozhayeva et al. (2024) similarly find that Kazakhstani universities need more flexible employment policies and incentive systems to retain and motivate academic staff amid demographic pressures and brain drain.

The approaches and initiatives to the development of internal quality assurance systems vary from one country to another, from one higher education institution to another. Up to now, a number of studies have highlighted factors and practices associated with internal quality assurance systems in higher education (Noda A. et al., 2021). There is a growing body of case studies that recognise the importance of building internal quality assurance through 'self-evaluation' (Stalmeijer, R. et al., 2016). Serrano et al. (2025) further demonstrate that management support and institutional leadership are the strongest predictors of quality assurance effectiveness, ahead of infrastructure quality and faculty engagement.

With a shift to non-profit organizations, in the framework of managerial autonomy, university leaders in Kazakhstan faced difficulties and challenges in implementing new management approaches and strategies (Sagintayeva, A., Kurakbayev K. (2015). Accreditation becomes an external QA tool to report the achievements of institutions and to apply for state funding/grants. The internal quality assurance system has not been structured effectively yet. The Ministry of Science and Higher Education emphasized the importance of flexible higher education management that can quickly adapt to modern changing conditions. According to the Project of the National Report for the First Congress of Teachers, "Access to Quality Education to Everyone", the importance of implementing a data/evidence-based quality management system was highlighted. Policymakers claim that it is crucial to implement education policy based on strategic planning. In addition, the Project of the National Report has identified the role of reliable research and ongoing analysis of the educational environment to ensure good planning (Accessible Quality Education to Everyone, 2023). Narbaev et al. (2025) confirm that Kazakhstan's national higher education and science projects over the past decade have prioritised research capacity-building, though systematic evidence-based planning remains uneven across institutions. Thus, in light of current changes and rising competitiveness in educational and labour

markets, higher education institutions need to reconsider existing quality management practices and implement data-driven decision-making processes through institutional research practices. Gaftandzhieva et al. (2023) note that, despite growing interest, higher education institutions still lack mature data-driven decision-making practices and standardised tools for turning institutional data into policy action. Institutional research, institutional evaluation and data analysis increasingly play a pivotal role in supporting, improving and making effective decisions to assure quality educational services for all in higher education environments. So, what is institutional research? Why is it important for universities to organize institutional research practices?

The history of institutional research development takes its root in the USA from the ‘Managerial Revolution’ in the 1960s (Volkwein J.F., 2008). Institutional research has evolved in the U.S. as an important practice in higher education institutions to employ data, analytics, information, and evidence to make effective decisions and take actions for institutional improvement (Duties and Functions of Institutional Research (n.d.)). More recently, a growing body of research has examined how data analytics capability is reshaping the institutional research function itself, extending its role from routine compliance reporting toward strategic, evidence-based support for institutional decision-making (Robersshaw, K. L., et al., 2024). However, data-driven decision-making can be subverted by economic pressures, turning data into a competitive resource and weakening the collaboration among administrators, faculty and staff members responsible for student success efforts (L.D. Taylor, 2020).

Research methods

This study uses a conceptual theoretical framework approach by focusing on new ideas and practices, rather than just looking for gaps in existing studies. It can also be described as an evidence-based approach, especially because it uses research results to find practical solutions. To support the study, a systematic literature review was conducted using the Web of Science Core Collection. The search included keywords such as “institutional research,” “institutional effectiveness,” “higher education,” and “university,” applied to the “Title” field (that is, the titles of articles, conference papers, books, and book chapters). The initial search produced 199,268 results. The reason for exploring the research question in the Web of Science Core Collection is that it is the most respected database globally, offering scientific sources and research materials across all scientific disciplines, integrated through citation. An editorial committee oversees the selection of top-tier research to ensure the provision of high-quality scientific information. The Web of Science Core Collection serves as a global network, encompassing the best research across all fields of science, bridging nations, languages, terminology, and time periods.

To ensure transparency in line with a PRISMA-informed screening logic, the stages, filters and rationale applied to reduce the initial Web of Science Core Collection sample to the final analytic set are summarised in Table 1. No date range restriction was applied at any stage, since the aim was to capture the full historical development of the field from its earliest documented appearance to the present.

Table 1 – Literature screening stages and inclusion/exclusion criteria

Stage	Filter applied	Records remaining	Rationale
1. Initial search	Title search for “institutional research”, “institutional effectiveness”, “higher education”, “university” in the WoS Core Collection; no date restriction	199,268	Maximise recall to capture the full scope of literature using these terms
2. Document type	Restricted to “Article”	106,364	Excludes proceedings papers, book reviews, editorial material and book chapters to retain peer-reviewed journal research

3. Language	Restricted to English	92,188	Ensures consistent interpretation and comparability of findings
4. Subject / WoS category	Restricted to Education & Educational Research, Management, Education Scientific Disciplines, Business, Economics, Social Sciences Interdisciplinary	17,422	Focuses on literature substantively addressing higher education management rather than incidental use of the search terms
5. Country/region	Restricted to USA, Europe, England, and Central Asia (Kazakhstan, Kyrgyzstan, Uzbekistan)	12,243	Aligns with the paper's comparative focus on where institutional research originated (USA), diffused (Europe/England), and the Kazakhstani context under study

Note: compiled by the author based on the research. Screening conducted within the Web of Science Core Collection; percentages of the initial sample retained at each stage are 53.4%, 46.2%, 8.7%, and 6.1%, respectively

Results and Discussion

The extracted publication types include proceedings papers, articles, reviews, book reviews, editorial material, and book chapters. Then, the search by document type and “Article” reported 106 364 papers. Then, to facilitate the research, the search was narrowed by selecting the “English” language, where 92 188 papers were obtained. The main focus of the research was an exploratory literature review of the existing studies on institutional research practices in higher education. The next level of our analysis focused on research fields, mainly “Web of Science categories”. After narrowing to the higher education management field, particularly to categories «Education Educational Research», «Management», «Education Scientific Disciplines», «Business», «Economics» and «Social Sciences Interdisciplinary», 17 422 records have been identified. Please refer to Figure 1.

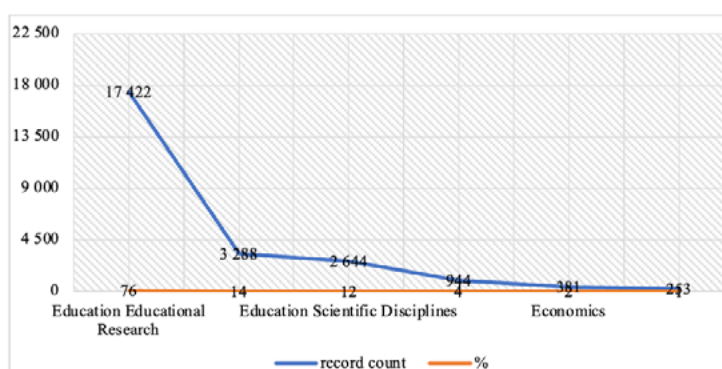


Figure 1 – Segmentation of publications by categories

Note: Author's analysis based on the literature review

Additionally, the research examined countries and regions to identify where topics related to institutional research and effectiveness are addressed in order to enhance the overall quality and performance of university activities. Since the literature review spans the entire available period in the database, the paper did not limit its search by a specific time range. Since the concept of institutional research first developed in the United States and was later adopted in Europe, the search was narrowed to studies from the USA, Europe, and Central Asian countries. This was done to better understand how widely the topic has been studied in higher education and how important it is considered within the field. The search identified 12,243 papers. Please see Figure 2.

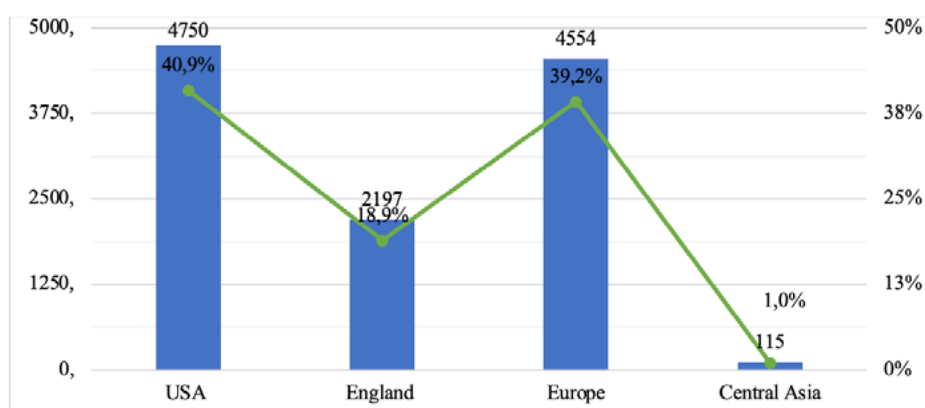


Figure 2 – Number of publications in the segmentation of the “Countries/Regions” category

Note: Author’s analysis based on the literature review

When looking at studies on institutional research in higher education across the USA, England, Europe, and Central Asia, clear differences can be seen in how much attention each region has received. The United States has the largest number of publications, with a total of 4,750. This highlights its leading role in developing and applying institutional research within higher education. In addition, it indicates the extensive academic and practical engagement with this field, which is deeply embedded in the structure of U.S. higher education. American institutions have long prioritized data-driven approaches to improve quality and effectiveness, and the high number of studies suggests a well-established and continuous focus on institutional research. More discussion on the historical development of institutional research practices in the U.S. have been provided in the following section.

Europe, with a total of 4,554 publications, is just slightly behind the USA. This indicates that, while institutional research is a priority across many European countries, the emphasis may be spread across a larger and more diverse set of nations. The research landscape in Europe is likely shaped by varying national policies, educational systems, and levels of commitment to institutional research. The broad spread of studies across Europe highlights the region’s growing focus on data-driven educational strategies, although not as centralized or uniform as in the U.S.

England follows with 2,197 publications, demonstrating a significant interest in institutional research, although it is approximately half the volume seen in the USA. The slightly lower number may reflect the fact that institutional research in the UK is a more recent development compared to the U.S. In contrast, the UK has also made strong progress in applying institutional research within higher education policy and practice, which is reflected in a substantial body of academic work in this area.

Central Asia, however, shows a much smaller number of publications, only 115. This suggests that institutional research is still at an early stage of development in the region. The database also included just three countries: Kazakhstan, Kyrgyzstan, and Uzbekistan. This limited output indicates that the topic has not yet become widely studied or fully integrated into higher education policy and practice. It may also point to challenges such as limited research capacity, funding, and international collaboration. Although the region is increasingly aware of the need to improve higher education quality, institutional research is still an emerging field.

Overall, the systematic literature review shows that institutional research in Kazakhstani higher education is highly relevant. It supports more data-informed decision-making and contributes to improving the overall quality of education in the country. The review demonstrates that the USA and Europe have the most extensive engagement with institutional research, with the U.S. leading due to its long-standing focus on the field. England follows closely, though its research volume is smaller, possibly due to the more recent emergence of institutional research in the UK. Central Asia, with a significantly lower volume, highlights the emerging stage of institutional research in the region, where further development and research investment are needed to strengthen its role in higher education. It should be acknowledged that these figures represent absolute publication counts rather than normalised, per-capita measures. They are influenced by the number of countries included in each region, the overall size of each region’s research system, and its broader research output, and therefore do not reflect only the prominence of institutional research as a topic. The share-of-total figures added to Figure 2 (40.9% USA, 39.2% Europe, 18.9% England, and 1.0%

Central Asia) provide some context by showing each region's proportion of the reviewed publications. However, a more detailed normalisation, such as publications per higher education institution or per researcher, would require comparable institutional and workforce data across all four regions. Such data are beyond the scope of this bibliometric review and are therefore identified as an area for future empirical research.

Institutional research: Historical development and the content

The history of the emergence of the institutional research concept dates to 1960 when a small group of academics was invited to a "seminar on institutional research" to lay the groundwork for the National Institutional Research Forum (NIRF) and initiated the identification, organization, and development of a significant professional field within higher education administration, or in another word most commonly known as institutional research (IR). Following this, the Association for Institutional Research (AIR) was founded in 1966 (<https://www.airweb.org/>).

Association for Institutional Research is a global organization that supports professionals in higher education in using data, analytics, and evidence to make better decisions. The focus is on ensuring that these decisions are effective, fair, and ethical. Its main goal is to encourage the use of data in ways that benefit both students and institutions, and ultimately help improve the overall quality of higher education. AIR is an international association of higher education professionals, established in 1966 as a non-profit organization and a global association for higher education professionals advocating and supporting institutional research practices and offices in higher education institutions through a wide range of training programmes, services, workshops, and resources. The organization is overseen by a 12-member Board of Directors elected by its members. This Board defines the Association's vision and purpose, establishes policies, and oversees the results of its operational activities. The operations are managed by an Executive Director and a team of dedicated staff who work to carry out the Board's vision through strategies and actions that promote the profession and enhance higher education through data-driven decision-making (<https://www.airweb.org/>).

Stickler (1967) cited 'Institutional Research' as a new managerial approach in higher education organizations and defined it as "useful or necessary in making of intelligent administrative decisions and/or for the successful operation, maintenance and/or improvement of a given institution of higher education". Following Suslow (1971), the first President of the Association for IR in the USA identified 'institutional research' as a practice to oversee, assess and evaluate all aspects of HE and as a means to achieve the desired goals.

Joe Saupe (1990) defined 'institutional research' as 'decision support' and university activities to promote 'institutional planning, policy formation, and decision making'. As has been stated, institutional research has evolved in the U.S. as an important practice in higher education institutions to employ data, analytics, information, and evidence to make effective decisions and take actions for institutional improvement.

Volkwein (2008) describes 'the golden triangle' of institutional research, which combines the following functions: 'a) institutional reporting and administrative policy analysis, b) strategic planning, enrolment and financial management, and c) outcomes assessment, programme review, accountability, accreditation and institutional effectiveness'.

Swing, R.L., Ross, L.E. (2016) highlighted the significance of the organization of institutional research operations in conjunction with other departments and units to transform data into decision-support information and to achieve the institution's mission. Scholars claim that the top-down organizational structure of institutions does not bring institutional effectiveness. Engagement of stakeholders, students, faculty, staff and other interested parties as decision makers in data-driven decision-making processes as customers of IR, is an essential approach to ensure institutional improvement and bring change. The role of culture in an institution has a profound impact on the successful implementation of institutional research activities. Association for Institutional Research (AIR) states that the use of data, analytics, information and evidence for decision-making in HE is crucial to ensure student success and improve institutional effectiveness (<https://www.airweb.org/>).

The most interesting aspect of institutional research offices in the US higher education landscape is that the Institutional Research offices are subject to benchmarking called "National Survey of Institutional Research Offices" to leverage the obtained data for improvement. The National Survey of IR Offices was launched in 2015 as a measurement tool to expand knowledge about IR offices' capabilities and resources and to build a benchmarking tool.

Randy Swing (2009 a, b) described the three phases of Institutional Research development in the USA in terms of technology application and classified Institutional Research offices by mission/function statement. Table 2 and Figure 3 illustrate his conclusions.

Table 2 – The evolution of Institutional Research offices

I phase	II phase	III phase
1950s -1960s - Use of files for calculation, 'descriptive and statistics' correlations	Use of statistics programmes such as SPSS (Statistical Package for the Social Sciences and SAA (Serial Attached SCSI) for estimation of large data, on a mainframe basis.	The current IR offices – application of complicated statistics and datasets

Note: Compiled by the Author based on (Randy L. Swing, 2009 b).

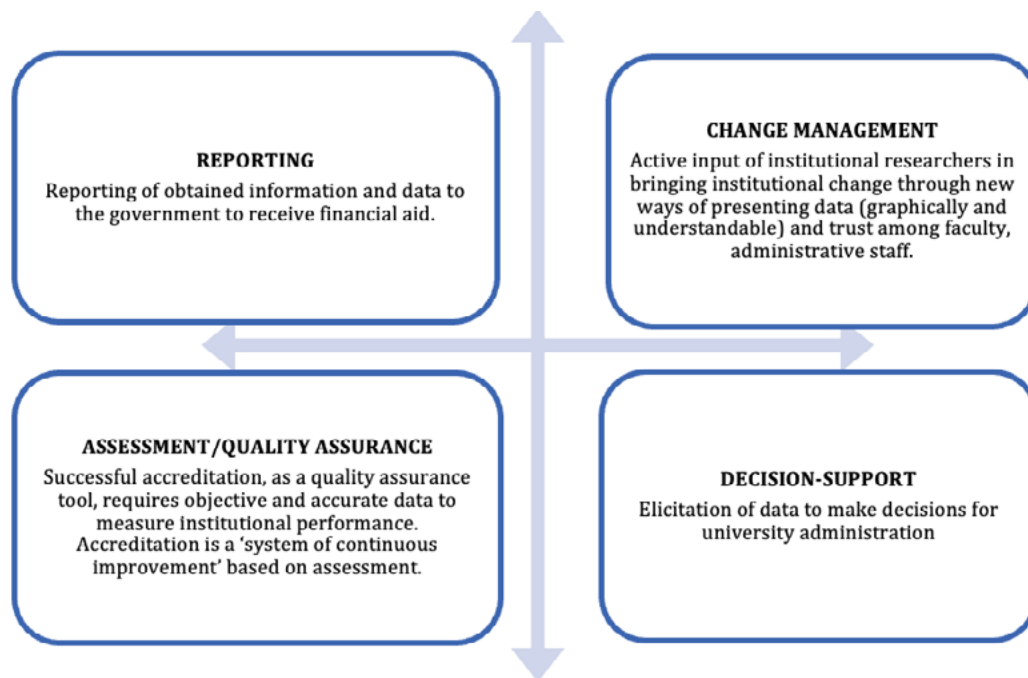


Figure 3 – Classification of Institutional Research offices by mission/function statement

Note: compiled based on Randy L. Swing (2009 b).

Volkwein J. Fredericks (2010) distinguishes IR as 'inspirational', focused on 'internal improvement', and 'pragmatic', focused on 'external accountability'. He developed a model to assess institutional effectiveness focused on the assessment of institutions, programmes, faculty, and students. The American practice demonstrates the role and importance of Institutional Research offices in sustaining quality education and can serve as a road map for planning of higher education institutions from other countries (Randy L. Swing, 2009 b).

The AIR has developed the key duties and functions of Institutional Research offices in universities. Figure 4.

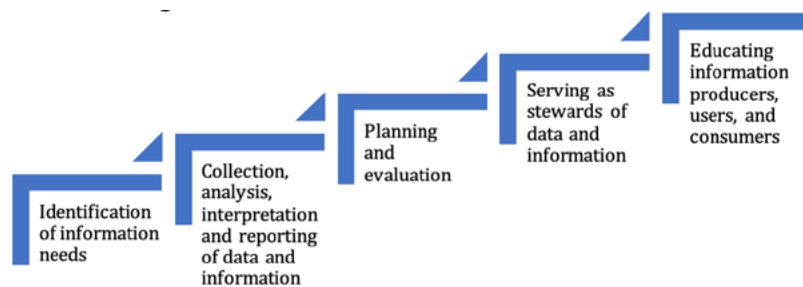


Figure 4 – Duties and Functions of IR

Note: compiled based on (<https://www.airweb.org/>)

It is noted that it is up to the institution to adapt the described duties and functions, but to maintain the core mission of institutional research practices. IR offices can be a big unit, which is an ideal picture, comprising its own office, budget, staff, space, collective mission and staff roles/functions. However, IR offices can also be a part of a Bigger unit at institutions and have a 'sister' units that have similar functions and operations, so-called 'combo' offices. Table 3. (Jones, D., 2018). The National Survey of IR offices in the U.S. was launched in 2015 as a measurement tool to expand the knowledge about IR offices' capabilities and resources. Utilization of data through student participation as decision-makers (Randy L. Swing, 2009 b).

Table 3 – The common structure of IR Offices based on the U.S. experience

IR Office structure and work	Office staff
Reporting Institutional effectiveness Strategic planning Accreditation Analytics Decision support Assessment	Office leader Analytical staff (collecting, reporting data) Technical staff (data-based management, programming) Administrative support staff Other managerial staff Student staff

Note: compiled based on Darlena Jones (2018).

Given that, it is important to study the role of institutional research in light of rising accountability, accreditation and competition in higher education institutions. The institutional research offices are mainly part of an academic affairs department, reporting to the provost or vice-president (vice-rector).

The possible implications of IR practices in the Kazakhstani Quality assurance context

Today, HEIs in KZ are facing a challenge to efficiently use data and analyse it. The common practice is using data to define problems at the initial stage and to evaluate outcomes at the final stage. Randy Swing, a former executive director of the Association for Institutional Research, claims that there is always a gap in terms of the implementation stage between problem identification and result evaluation (Randy L. Swing, 2009 b).

In fact, several events and discussions to promote IR and data-driven decision-making practices to improve the quality of education took place in the country. To illustrate, the seminar on "Institutional Research and their Role in educational organizations," organized by Nazarbayev University and KIMEP in 2016, Forum on "Institutional Studies: Using Data to Support Academic Quality and Decision-Making in Higher Education", which took place in 2019 at Nazarbayev University", the seminar "Institute of Academic Leadership - Data-Based Decision Making", initiated by the Ministry of Science and HE (MSHE) of the Republic of Kazakhstan and the Graduate School of Education of Nazarbayev University in 2023.

Today, with the rise of technology and the advancement of AI, the necessity to gather, examine, and use data for strategic planning, policymaking and decision support in Higher Education has increased. Another important aspect of the introduction of IR practices based on data-driven decision-making policy is the transformation of national universities into research institutions, which requires new approaches and effective management mechanisms. Today, university administrators and quality managers face challenges in preserving the competitive potential of universities in educational and labour markets nationally and globally in a long-term perspective.

The challenge in the case of Kazakhstani higher education in the field of quality assurance is that all activities are performed solely for reporting and accounting to the government. There are indeed challenges in relation to data collection, effective use of information, ineffective utilization of accreditation results and poor motivation to do data analysis and self-assessment. Using data originally developed for government oversight rather than institutional improvement is a challenge. It is important to implement institutional research procedures and develop strategies and mechanisms on how to develop and create IR, which integrate data analysis, information collection, accreditation and internal assessment procedures. The practice of IR to support data-driven decision-making processes is lacking in national universities, being transformed into research ones (Assaniyaz A., 2022). In light of this transformation, a necessity to reconsider current quality assurance practices in public universities and apply managerial practices of the best research universities is the demand of time.

Having reviewed the historical evolution, organizational forms, and functions of institutional research documented above, drawn primarily from U.S. sources and international literature, the remainder of this section shifts from describing foreign experience to the author's own analysis of Kazakhstani practice. The organizational mapping in Table 4 and the interpretation that follows are original contributions of this study, intended to identify where Kazakhstani universities already show functional analogues of institutional research and where the U.S. experience suggests a distinct path for adaptation, rather than a direct copy of foreign structures.

The priority of economic and social development in developed countries is the quality of education, since in the modern economy human capital plays an important role in light of technological development and the emergence of AI technology. The organizational chart of quality assurance, quality management, and institutional research departments in Kazakhstani universities has been analysed and provided in Table 4.

Table 4 – Organizational structures of quality assurance offices in Kazakhstani HEIs

Institution name	Office	Subdivisions
Eurasian National University https://enu.kz/en/page/university/management-and-structure/administrative-division/departments-of-strategic-development	Department of Strategic Development	Strategic planning department; Accreditation and rating department
Kazakh National Agrarian University	Department of analysis and strategy	not available
Kazakh National Women's Teacher Training University https://qyzpu.edu.kz/ru/struktura	Department of Academic Programs Development and Quality Assurance	Office of Academic Programs Development; Office of Academic Quality Assurance*
Satpayev University https://official.satbayev.university/en/subdivisions/cdd	Strategic Development Department	Department of Evaluation and Quality; Department of Strategic Management; Department of Information and Analytical; Department of Institutional and Scientometric Research
Abai Kazakh National Pedagogical University https://www.kaznpu.kz/ru/1086/page/	Office of Institutional Effectiveness; Department of Strategy; Department of Educational Programme Analysis	Development strategy support department; Risk assessment department; International ratings department
Al-Farabi Kazakh National University https://farabi.university/university/structural-divisions/38?lang=ru&active_tab_order=1	Center for accreditation and institutional research	Accreditation and Licensing Service; Service for quality control of educational programs
Nazarbayev University	Institutional Effectiveness Office	Institutional research and analytics; Academic quality enhancement; Innovative learning; Institutional evaluation, ranking and accreditation
Astana IT University https://astanait.edu.kz/quality-assurance-department/	Department of Quality Assurance	No subdivisions

SDU University https://sdu.edu.kz/language/en/quality-assurance-2/quality-assurance/	Quality assurance department	Quality assurance; Institutional research
KIMEP university https://www.kimep.kz/about/en/division-of-research-international-and-strategic-affairs/	Office of Quality Assurance and Institutional Research	No subdivisions
Narxoz University	Department of Accreditation and Institutional Research	No subdivisions description

Note: developed based on the website of institutions.

*Information about the office's main activities and responsibilities was not available. This gap reflects the limits of publicly available institutional documentation rather than a confirmed absence of such functions, and the table should be read as an indicative rather than exhaustive mapping of practice

This study identifies the insufficient emphasis placed by Kazakhstani national universities on institutional research practices through an analysis of their overall organizational structures. It has been observed that only a limited number of institutions, mainly private ones such as Nazarbayev University and KIMEP, actively utilize data and analytical methods for decision-making and quality enhancement processes. Thus, this research paper has taken as a basis the main resources and educational means of Institutional research associations that emerged in the U.S. to understand the context and structure of IR offices in higher education institutions.

The research findings indicate that Kazakhstani higher education institutions primarily focus on quality assurance practices, which involve processes and systems aimed at ensuring and improving the quality of educational outcomes, whereas activities on institutional research through gathering, analyzing, and employing data to inform decision-making and policymaking are lacking. Thus, the main objective of this paper is to introduce the concept of institutional research and propose its integration into quality assurance practices in Kazakhstan. Additionally, the paper seeks to provide a theoretical foundation for understanding this new concept.

Conclusion

Beyond the conceptual case made above, moving from description to action requires a concrete organizational path. Building on the U.S. 'combo office' model discussed earlier and the existing organizational structures identified in Table 4, four concrete steps are proposed to guide the phased introduction of institutional research into Kazakhstani higher education:

Organizational model – establishment of a dedicated Institutional Research

(IR) office, or formally renaming and expanding an existing strategic-development/QA unit, reporting directly to the rector or vice-rector for academic affairs, following the 'combo office' model already used at Nazarbayev University and KIMEP (see Table 4), which pairs institutional research with quality assurance and accreditation functions rather than treating them as separate units.

Funding mechanism – allocation of a dedicated portion of existing

institutional development or strategic planning budgets to institutional research (IR) functions. This could be supplemented by targeted grants from the Ministry of Science and Higher Education, to cover initial staffing, software, and training costs. This approach would avoid the need for new budget allocations.

Staffing - recruitment or reassigning 2–3 analysts per institution with

combined competence in data analytics, higher education policy, and institutional reporting, and providing structured professional development (it can be internally supported or externally through the international partnerships and internship programmes (e.g., Bolashaq) to established IR offices abroad.

Pilot institutions – piloting the model at 2–3 national universities that already

have partial infrastructure in place (e.g., Eurasian National University, Al-Farabi Kazakh National University, and Satbayev University), before extending it system-wide, with a formal evaluation after 2–3 academic years to assess impact on data-informed decision-making and accreditation outcomes.

In conclusion, the phased introduction of institutional research in Kazakhstani higher education can build on existing structures rather than requiring entirely new systems. Establishing dedicated or expanded IR functions, supported by existing budgets and trained staff, and piloting the model at selected universities would provide a practical pathway toward more systematic, data-informed decision-making across the sector. Thus, this study helps create a basis for future empirical research in this area by looking closely at how universities currently use these practices. The findings are useful not only for the Ministry of Science and Higher Education of the Republic of Kazakhstan, but also for university leaders and other stakeholders who aim to strengthen data-informed decision-making and policy development. As higher education becomes more competitive and accountable, using institutional research effectively will be key to improving quality and helping universities in Kazakhstan respond to future challenges.

Acknowledgements

The author would like to sincerely thank the Government of Kazakhstan and the international “Bolashaq” programme for providing the opportunity to complete a research internship at a leading global research university, which formed the foundation of this study. Special appreciation is also extended to the coordinators and professors at George Washington University for their support, time, and openness in sharing their expertise in institutional research, as well as for their valuable feedback on the research topic.

Conflict of interest

The authors declare no conflict of interest.

Authors' contribution

The author is the sole contributor to the conception, research, and writing of this article.

Information on funding

The study was fully supported by the project AP22685018, funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan.

References

1. Accessible Quality Education to Everyone. (2023). Retrieved January 20, 2023, from <https://www.gov.kz/memleket/entities/edu/press/article/details/135521?lang=kk>
2. Agasisti, T., & Petrenko, O. (2024). Higher education and economic development: A bibliometric analysis 1985–2022. *European Journal of Education*, 59(3), <https://doi.org/10.1111/ejed.12653>
3. Assaniyaz, A. (2022). Three leading Kazakh universities to become research institutions, develop breakthrough technologies. *The Astana Times*. Retrieved from <https://astanatimes.com/2022/08/three-leading-kazakh-universities-to-become-research-institutions-develop-breakthrough-technologies/>
4. Belkhozhayeva, D., Buribayev, Y., & Khamzina, Z. (2024). Transformations in academic employment: A comprehensive analysis of university staff relations. *Journal of Educational and Social Research*, 14(5), 431–448. <https://doi.org/10.36941/jesr-2024-0149>
5. Jones, D. (2018). Association for Institutional Research: The 2018 National Survey of IR Offices. Retrieved from <https://www.airweb.org/collaborate-learn/webinars/how-does-my-ir-office-compare>
6. Duties and functions of institutional research. (n.d.). Retrieved March 10, 2023, from <https://www.airweb.org/ir-data-professional-overview/duties-and-functions-of-institutional-research>
7. Europe and Central Asia economic update: Sluggish growth, rising risks. (2023). World Bank. Retrieved January 20, 2023, from <https://www.worldbank.org/en/region/eca/publication/europe-and-central-asia-economic-update>

-
8. Gaftandzhieva, S., Hussain, S., Hilčenko, S., Doneva, R., & Boykova, K. (2023). Data-driven decision making in higher education institutions: State-of-play. *International Journal of Advanced Computer Science and Applications*, 14(6), 397–405. <https://doi.org/10.14569/IJACSA.2023.0140642>
 9. Kataria, P., & Rajput, C. S. (2025). Assessing service quality in higher education: A four-decade literature review (1984–2024). *Quality Assurance in Education*, 34 (3), 415–434. <https://doi.org/10.1108/QAE-08-2025-0229>
 10. Kerimkulova, S., & Kuzhabekova, A. (2017). Quality assurance in higher education of Kazakhstan: A review of the system and issues. In *The Rise of Quality Assurance in Asian Higher Education*, 87–108. <https://doi.org/10.1016/B978-0-08-100553-8.00006-9>
 11. Mahroeian, H., & Daniel, B. (2021). Is New Zealand's Higher Education Sector Ready to Employ Analytics Initiatives to Enhance its Decision-making Process? *International Journal of Artificial Intelligence in Education*, 31(4), 940–979. <https://doi.org/10.1007/s40593-020-00234-y>
 12. Manarbek, G., & Kondybayeva, S. (2024). Quality assurance practices in higher education: Lessons from the U.S. and implications for Kazakhstan. *Journal of Higher Education Policy and Leadership Studies*, 5(3), 66–86. <https://doi.org/10.61186/johepal.5.3.66>
 13. Mukhatayev, A., Omirbayev, S., Kassenov, K., & Idiyatova, Y. (2024). Quality assurance system of higher education in Kazakhstan through stakeholders' eyes: An empirical study to identify its challenges. *Education Sciences*, 14(12), 1297. <https://doi.org/10.3390/educsci14121297>
 14. Narbaev, T., Amirbekova, D., & Bakdaulet, A. (2025). A decade of transformation in higher education and science in Kazakhstan: A literature and scientometric review of national projects and research trends. *Publications*, 13(3), 35. <https://doi.org/10.3390/publications13030035>
 15. Noda, A., Kim, S., Chi Hou, A. Y., Lu, J. G., & Chou, H. C. (2021). The relationships between internal quality assurance and learning outcome assessments: Challenges confronting universities in Japan and Taiwan. *Quality in Higher Education*, 27(1), 59–76. <https://doi.org/10.1080/13538322.2020.1838406>
 16. Pushpakumara, H. M. C., Jayaweera, P. M., & Wanniarachchige, M. K. (2023). Issues and challenges of quality assurance in higher education institutes: A systematic literature review. *Journal of Management Matters*, 10(1), 49–65. <https://doi.org/10.4038/jmm.v10i1.47>
 17. Robersshaw, K. L., Xiao, M., & Wolf, B. G. (2024). Research analytics in higher education: Systematic literature review, synthesis, and conceptual framework. *Research Management Review*, 27(1), 1–19.
 18. Sagintayeva, A., & Kurakbayev, K. (2015). Understanding the transition of public universities to institutional autonomy in Kazakhstan. *European Journal of Higher Education*, 5(2), 197–210. <https://doi.org/10.1080/21568235.2014.967794>
 19. Salmi, J. (2015). Evidence-Based Policies in Higher Education: Data Analytics, Impact Assessment and Reporting. In: Curaj, A., Matei, L., Pricopie, R., Salmi, J., Scott, P. (eds) *The European Higher Education Area*. Springer, Cham. https://doi.org/10.1007/978-3-319-20877-0_49
 20. Saupe, J. L. (1990). The functions of institutional research. Association for Institutional Research. Retrieved March 20, 2023, from <https://eric.ed.gov/?id=ED319327>
 21. Serrano, O. M. E., Miranda González, F. J., & Mourato, J. A. B. (2025). Determinants of the effectiveness of quality assurance systems and institutional performance in higher education. *Cogent Education*, 12(1). <https://doi.org/10.1080/2331186X.2025.2581411>
 22. Stalmeijer, R., Whittingham, J., Grave, W., & Dolmans, D. (2016). Strengthening internal quality assurance processes: Facilitating student evaluation committees to contribute. *Assessment & Evaluation in Higher Education*, 41(1), 53–66. <https://doi.org/10.1080/02602938.2014.976760>
 23. Stickler, W. H. (1967). The role of institutional research in the managerial revolution in higher education: An overview. In E. F. Schietinger (Ed.), *Introductory Papers on Institutional Research*, 1–15. Southern Regional Education Board.
 24. Suslow, S. (1971). Present reality of institutional research: Presidential address. In C. L. Stewart (Ed.), *Proceedings of the 11th Annual Forum of the Association for Institutional Research*, 1–3.
 25. Swing, R. L. (2009a). Institutional researchers as change agents. *New Directions for Institutional Research*, 143, 5–16. <https://doi.org/10.1002/ir.301>

-
26. Swing, R. L. (2009b). Institutional research in the USA. Perspectives: Policy and Practice in Higher Education, 13(3), 63–65. <https://doi.org/10.1080/13603100903068890>
27. Swing, R. L., and Ross, L. E. (2016), Statement of Aspirational Practice for Institutional Research. Association for Institutional Research, Tallahassee, Florida, Retrieved March 25, 2023 from <http://www.airweb.org/aspirationalstatement>.
28. Taylor, L. D. (2020). Neoliberal Consequence: Data-driven decision making and the subversion of student success efforts. The Review of Higher Education, 43, 1069 - 1097. <https://doi.org/10.1353/rhe.2020.0031>
29. The Association for Institutional Research. (n.d.). Retrieved March 10, 2023, from <https://www.airweb.org/>
30. Volkwein, J. F. (2008). The foundations and evolution of institutional research. New Directions for Institutional Research, 141, 1–16. <https://doi.org/10.1002/he.289>
31. Volkwein, J. F. (2010). A model for assessing institutional effectiveness. New Directions for Institutional Research, 1, 13–28. <https://doi.org/10.1002/ir.328>

Г.М. Манарбек

Әл-Фараби атындағы Қазақ ұлттық университеті, Алматы, Қазақстан

Жоғары білім берудегі институционалдық зерттеулер: Тарихи контекст және экономикалық дамуға әсері

Аңдатпа. Мақсаты – бұл мақала институционалдық зерттеу (ИЗ) тәжірибесінің тарихи дамуын қарастырады және оның Қазақстан жоғары білім беруіндегі деректерге негізделген сапа менеджментін нығайтудағы өзектілігін зерттейді. Әдістер – тұжырымдамалық негіз жүйелі әдебиетке шолумен біріктіріліп, ИЗ және жоғары білім аналитикасындағы негізгі теориялық көзқарастарды, ұйымдастырушылық модельдерді және тәжірибелерді синтездеу үшін пайдаланылды, бұл тәсілдерді Қазақстандық контекстке бейімдеуге баса назар аударылды. Нәтижелер – АҚШ, Еуропа, Англия және Орталық Азия басылымдарын библиометриялық салыстыру ғалымдардың ИЗ-ға назар аударуындағы айтарлықтай айырмашылықтарды көрсетеді. АҚШ-та 4750 басылым (шолудан өткен жалпы санның 40,9%), одан кейін Еуропада 4554 (39,2%), ал Англияда 18,9% құрайды. Орталық Азияда Қазақстан, Қырғызстан және Өзбекстанды қамтитын тек 115 басылым (1,0%) бар. Бұл нәтижелер ИЗ аймақтағы дамудың бастапқы кезеңінде екенін көрсетеді. Болашақ зерттеулер үшін әрбір мекеме немесе зерттеуші бойынша басылымдар сияқты егжей-тегжейлі нормалау ұсынылады. АҚШ-тың «біріктірілген кеңсе» моделіне және Назарбаев Университеті мен КИМЭП-тегі қолданыстағы тәжірибелерге сүйене отырып, мақалада Қазақстандағы ИЗ әлеуетін дамытудың тіректері ұсынылған. Қорытынды – институционалдық зерттеу әлеуетін дамыту дәлелді шешім қабылдауды және деректерге негізделген мәдениетті нығайта алады, үздіксіз сапаны жақсартуды қолдайды және университеттерге тез өзгеретін еңбек нарығына тиімдірек жауап беруге көмектеседі.

Түйін сөздер: институционалдық зерттеулер, жоғары білім, сапаны басқару, білім беру сапасы, деректерге негізделген шешімдер қабылдау, экономикалық даму

Г.М. Манарбек

*Казахский национальный университет имени аль-Фараби,
Алматы, Казахстан*

Институциональные исследования в высшем образовании: исторический контекст и последствия для экономического развития

Аннотация. Цель - изучить историю развития институциональных исследований (ИР) и определить их значение для совершенствования управления качеством высшего образования в Казахстане на основе данных. Методы - для обобщения ключевых теоретических подходов, организационных моделей и практик

в области ИР и аналитики высшего образования использованы концептуальная рамка и систематический обзор литературы. Особое внимание уделено возможностям адаптации международного опыта к условиям казахстанской системы высшего образования. Результаты - библиометрический анализ публикаций из США, Европы, Англии и Центральной Азии выявил значительные различия в научной представленности темы ИР. На долю США приходится 4750 публикаций (40,9% от общего числа рассмотренных работ), Европы - 4554 публикации (39,2%), тогда как доля Англии составляет 18,9%. На Центральную Азию, включая Казахстан, Кыргызстан и Узбекистан, приходится лишь 115 публикаций (1,0%). Полученные результаты показывают, что ИР в регионе находится на начальном этапе развития. Для дальнейших исследований предлагается использовать более детализированные нормализованные показатели, например количество публикаций в расчете на одно высшее учебное заведение или одного исследователя. На основе американской модели «комбинированного офиса», а также опыта Назарбаев Университета и КИМЭП предложены ключевые направления развития потенциала ИР в Казахстане. Выводы - развитие потенциала институциональных исследований может способствовать укреплению принятия решений на основе данных, формированию культуры работы с данными и непрерывному повышению качества образования, а также повышению способности университетов эффективно реагировать на быстрые изменения рынка труда.

Ключевые слова: институциональные исследования, высшее образование, управление качеством, качество образования, принятие решений на основе данных, экономическое развитие

References

1. Barşağa qoljetimdi sapaly bilim. Pedagogterdiñ I sezine Ûlttyq baiandama jobasy. (2023). Retrieved January 20, 2023, from <https://www.gov.kz/memleket/entities/edu/press/article/details/135521?lang=kk> [in Kazakh].
2. Agasisti, T., & Petrenko, O. (2024). Higher education and economic development: A bibliometric analysis 1985–2022. *European Journal of Education*, 59(3), <https://doi.org/10.1111/ejed.12653> [in English].
3. Assaniyaz, A. (2022). Three leading Kazakh universities to become research institutions, develop breakthrough technologies. *The Astana Times*. Retrieved from <https://astanatimes.com/2022/08/three-leading-kazakh-universities-to-become-research-institutions-develop-breakthrough-technologies/> [in English].
4. Belkhozhaeva, D., Buribayev, Y., & Khamzina, Z. (2024). Transformations in academic employment: A comprehensive analysis of university staff relations. *Journal of Educational and Social Research*, 14(5), 431–448. <https://doi.org/10.36941/jesr-2024-0149> [in English].
5. Jones, D. (2018). Association for Institutional Research: The 2018 National Survey of IR Offices. Retrieved from <https://www.airweb.org/collaborate-learn/webinars/how-does-my-ir-office-compare> [in English].
6. Duties and functions of institutional research. (n.d.). Retrieved March 10, 2023, from <https://www.airweb.org/ir-data-professional-overview/duties-and-functions-of-institutional-research> [in English].
7. Europe and Central Asia economic update: Sluggish growth, rising risks. (2023). World Bank. Retrieved January 20, 2023, from <https://www.worldbank.org/en/region/eca/publication/europe-and-central-asia-economic-update> [in English].
8. Gaftandzhieva, S., Hussain, S., Hilçenko, S., Doneva, R., & Boykova, K. (2023). Data-driven decision making in higher education institutions: State-of-play. *International Journal of Advanced Computer Science and Applications*, 14(6), 397–405. <https://doi.org/10.14569/IJACSA.2023.0140642> [in English].
9. Kataria, P., & Rajput, C. S. (2025). Assessing service quality in higher education: A four-decade literature review (1984–2024). *Quality Assurance in Education* <https://doi.org/10.1108/QAE-08-2025-0229> [in English].
10. Kerimkulova, S., & Kuzhabekova, A. (2017). Quality assurance in higher education of Kazakhstan: A review of the system and issues. In *The Rise of Quality Assurance in Asian Higher Education*, 87–108. <https://doi.org/10.1016/B978-0-08-100553-8.00006-9> [in English].
11. Mahroeian, H., & Daniel, B. (2021). Is New Zealand's Higher Education Sector Ready to Employ Analytics Initiatives to Enhance its Decision-making Process? *International Journal of Artificial Intelligence in Education*, 31(4), 940–979. <https://doi.org/10.1007/s40593-020-00234-y> [in English].
12. Manarbek, G., & Kondybayeva, S. (2024). Quality assurance practices in higher education: Lessons from the U.S. and implications for Kazakhstan. *Journal of Higher Education Policy and Leadership Studies*, 5(3), 66–86.

<https://doi.org/10.61186/johepal.5.3.66> [in English].

13. Mukhatayev, A., Omirbayev, S., Kassenov, K., & Idiyatova, Y. (2024). Quality assurance system of higher education in Kazakhstan through stakeholders' eyes: An empirical study to identify its challenges. *Education Sciences*, 14(12), 1297. <https://doi.org/10.3390/educsci14121297> [in English].

14. Narbaev, T., Amirbekova, D., & Bakdaulet, A. (2025). A decade of transformation in higher education and science in Kazakhstan: A literature and scientometric review of national projects and research trends. *Publications*, 13(3), 35. <https://doi.org/10.3390/publications13030035> [in English].

15. Noda, A., Kim, S., Chi Hou, A. Y., Lu, J. G., & Chou, H. C. (2021). The relationships between internal quality assurance and learning outcome assessments: Challenges confronting universities in Japan and Taiwan. *Quality in Higher Education*, 27(1), 59–76. <https://doi.org/10.1080/13538322.2020.1838406> [in English].

16. Pushpakumara, H. M. C., Jayaweera, P. M., & Wanniarachchige, M. K. (2023). Issues and challenges of quality assurance in higher education institutes: A systematic literature review. *Journal of Management Matters*, 10(1), 49–65. <https://doi.org/10.4038/jmm.v10i1.47> [in English].

17. Robersshaw, K. L., Xiao, M., & Wolf, B. G. (2024). Research analytics in higher education: Systematic literature review, synthesis, and conceptual framework. *Research Management Review*, 27(1), 1–19. [in English].

18. Sagintayeva, A., & Kurakbayev, K. (2015). Understanding the transition of public universities to institutional autonomy in Kazakhstan. *European Journal of Higher Education*, 5(2), 197–210. <https://doi.org/10.1080/21568235.2014.967794> [in English].

19. Salmi, J. (2015). Evidence-Based Policies in Higher Education: Data Analytics, Impact Assessment and Reporting. In: Curaj, A., Matei, L., Pricopie, R., Salmi, J., Scott, P. (eds) *The European Higher Education Area*. Springer, Cham. https://doi.org/10.1007/978-3-319-20877-0_49 [in English].

20. Saupe, J. L. (1990). The functions of institutional research. Association for Institutional Research. Retrieved March 20, 2023, from <https://eric.ed.gov/?id=ED319327> [in English].

21. Serrano, O. M. E., Miranda González, F. J., & Mourato, J. A. B. (2025). Determinants of the effectiveness of quality assurance systems and institutional performance in higher education. *Cogent Education*, 12(1), 2581411. <https://doi.org/10.1080/2331186X.2025.2581411> [in English].

22. Stalmeijer, R., Whittingham, J., Grave, W., & Dolmans, D. (2016). Strengthening internal quality assurance processes: Facilitating student evaluation committees to contribute. *Assessment & Evaluation in Higher Education*, 41(1), 53–66. <https://doi.org/10.1080/02602938.2014.976760> [in English].

23. Stickler, W. H. (1967). The role of institutional research in the managerial revolution in higher education: An overview. In E. F. Schietinger (Ed.), *Introductory Papers on Institutional Research* (pp. 1–15). Southern Regional Education Board [in English].

24. Suslow, S. (1971). Present reality of institutional research: Presidential address. In C. L. Stewart (Ed.), *Proceedings of the 11th Annual Forum of the Association for Institutional Research*, 1–3 [in English].

25. Swing, R. L. (2009a). Institutional researchers as change agents. *New Directions for Institutional Research*, 143, 5–16. <https://doi.org/10.1002/ir.301> [in English].

26. Swing, R. L. (2009b). Institutional research in the USA. Perspectives: Policy and Practice in Higher Education, 13(3), 63–65. <https://doi.org/10.1080/13603100903068890> [in English].

27. Swing, R. L., and Ross, L. E. (2016), Statement of Aspirational Practice for Institutional Research. Association for Institutional Research, Tallahassee, Florida, Retrieved March 25, 2023 from <http://www.airweb.org/aspirationalstatement> [in English].

28. Taylor, L. D. (2020). Neoliberal Consequence: Data-driven decision making and the subversion of student success efforts. *The Review of Higher Education*, 43, 1069 - 1097. <https://doi.org/10.1353/rhe.2020.0031> [in English].

29. The Association for Institutional Research. (n.d.). Retrieved March 10, 2023, from <https://www.airweb.org/> [in English].

30. Volkwein, J. F. (2008). The foundations and evolution of institutional research. *New Directions for Institutional Research*, 141, 1–16. <https://doi.org/10.1002/he.289> [in English].

31. Volkwein, J. F. (2010). A model for assessing institutional effectiveness. *New Directions for Institutional Research*, 1, 13–28. <https://doi.org/10.1002/ir.328> [in English].

Information about the author:

Manarbek G. - PhD, a post-doctoral researcher, Department of Management, Higher School of Economics and Business, al-Farabi Kazakh National University, 71 al-Farabi Ave., 050040, Almaty, Kazakhstan.

Манарбек Г. М. – PhD докторы, әл-Фараби атындағы ҚазҰУ Экономика және бизнес жоғары мектебі, менеджмент кафедрасының ғылыми қызметкері, Әл-Фараби даңғылы, 71, 050040, Алматы, Қазақстан.

Манарбек Г. М. – доктор философии (PhD), постдокторант кафедры менеджмента Высшей школы экономики и бизнеса, Казахский национальный университет имени аль-Фараби, пр. аль-Фараби, 71, 050040, Алматы, Казахстан.



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY NC) license (<https://creativecommons.org/licenses/by-nc/4>).