

# Transformation of universities in Kazakhstan: Research outcomes on the quality of higher education

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## CITATION

Azhibayeva A, Issaldayeveva S, Bakirova K, et al. (2024). Transformation of universities in Kazakhstan: Research outcomes on the quality of higher education. *Journal of Infrastructure, Policy and Development*. 8(10): 6844. <https://doi.org/10.24294/jipd.v8i10.6844>

## ARTICLE INFO

Received: 3 June 2024

Accepted: 19 June 2024

Available online: 23 September 2024

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**Abstract:** This article explores the transformative journey of universities in Kazakhstan, focusing on the results of recent research on the quality of higher education. The study delves into the significant reforms and innovations implemented in the Kazakhstani higher education system, assessing their impact on academic standards, student performance, and institutional efficiency. Through comprehensive data analysis and expert interviews, the research highlights the strides made in improving educational quality, fostering international collaborations, and integrating modern technologies in teaching and learning. The findings underscore the critical role of government policies, industry partnerships, and community participation in driving these transformations. This article provides valuable information on the challenges and successes experienced by Kazakhstani universities, providing a blueprint for further advances in the sector of higher education. The key factors contributing to the success of these reforms include strong government support, international collaboration, robust quality assurance mechanisms, a focus on research and innovation, and professional development for educators. While challenges remain, the future of higher education in Kazakhstan looks promising, provided that these efforts continue and are further refined to address existing gaps.

**Keywords:** higher education; quality; research outcomes; transformation; universities

## 1. Introduction

The transformation of universities in Kazakhstan is a multifaceted process influenced by various policy documents, accreditation standards, and governmental reports. Higher education (hereafter referred to as HE) in Kazakhstan's landscape has experienced significant transformations over the past few decades, driven by the nation's ambition to align itself with global educational standards and enhance the quality of its universities (Ahn et al., 2018; Azimbayeva, 2017).

Historically, Kazakhstan's HE system was modeled after the Soviet framework, characterized by centralized control and a focus on technical and vocational training. However, the post-independence era marked a shift towards a more diversified and autonomous higher education sector, reflecting global trends and the need for modernization (Mhamed et al., 2018).

The government's strategic initiatives, such as the State Program for Education Development and the Bolashak International Scholarship Program, have played a crucial role in this transformation (Akkari et al., 2023; Del Sordi, 2018; Jonbekova,

2023). These policies have emphasized internationalization, quality assurance, and integration of advanced technologies into the educational process. Additionally, partnerships with foreign universities and organizations have facilitated the exchange of knowledge and best practices, further contributing to the improvement of educational quality (Hamdullahpur, 2020).

The transformation of universities was preceded by targeted and consistent work to build up the scientific potential of universities. Particular attention was paid to attracting strong scientists to the university, expanding applied scientific research, and supporting young scientists (Chankseliani et al., 2021).

Despite significant efforts and investments in transforming the HE system in Kazakhstan, challenges remain in achieving and maintaining high standards of educational quality (Yelubayeva et al., 2023). The research issue represents the conflict between the need comprehensive examination of the transformative efforts within Kazakhstan's HE system and the insufficient focus on developing academic standards, student performance, and institutional efficiency in universities through reforms of HE (Kairat et al., 2024). These challenges can only be overcome through innovative research, to determine the crucial elements that contribute to the effectiveness of these reforms in improving the overall quality of HE. However, the main question is whether reforms of HE improve academic standards, student performance, and institutional efficiency in universities. If so, how does this happen? Unfortunately, despite the importance of improving the academic standards, student performance, and institutional efficiency in universities, the existing literature has not adequately studied the issue of developing academic standards, student performance, and institutional efficiency in universities based on reforms of HE. In this research, we focus on investigating the efficacy of significant reforms and innovations implemented in the Kazakhstani higher education system, assessing their impact on academic standards, student performance, and institutional efficiency.

## **1.2. Questions for research**

Q1: How do these reforms impact academic standards, student performance, and institutional efficiency in universities?

## **1.3. Objectives**

The objective of this article is to evaluate the impact of reforms of HE in Kazakhstan on academic standards, student performance, and institutional efficiency in universities.

## **1.4. Significance of the study**

The significance of this study lies in its comprehensive examination of the transformative efforts within Kazakhstan's HE system and their impact on educational quality (Sarmurzin et al., 2021).

The findings offer an in-depth evaluation of current policies, highlighting areas of success, and identifying gaps that need to be addressed. This can guide future policy decisions and improvements, ensuring more effective implementation and outcomes (Jumakulov et al., 2019; Minazheva et al., 2023; Yelibay et al., 2022).

The study's analysis of quality assurance mechanisms provides insights into their effectiveness, suggesting ways to strengthen these processes and ensure consistent educational standards across all institutions (Yakavets et al., 2023).

Insights from this research can help Kazakhstani universities improve their international standing, attract global talent, and foster international collaborations, thus enhancing their global competitiveness.

The experiences and lessons learned from Kazakhstan's higher education reforms can serve as a valuable reference for other countries undergoing similar transformations, providing a blueprint for successful educational reform initiatives (Lengellé et al., 2018).

## **2. Methods**

### **2.1. Research methods**

The qualitative method employed in this study is designed to provide a better understanding of the change in universities in Kazakhstan and the results of these reforms on higher education quality (hereafter referred to as HEQ). The research adopts a multimethod approach, incorporating case studies, interviews, and document analysis to gather comprehensive and nuanced insights. Triangulation was used in this study to cross-verify data from multiple sources, including interviews, document analysis, and case studies. This method improved the reliability and validity of the findings related to the transformation of universities in Kazakhstan.

### **2.2. Research sample**

All participants in this study were recruited from five universities in Kazakhstan. The choice of five universities in Kazakhstan as the sample for this study was guided by several key factors that ensure a comprehensive and representative analysis of higher education (HE) reforms and their impact on academic standards, student performance, and institutional efficiency. This selection process aimed to capture the diverse characteristics and dynamics present within the Kazakhstani higher education system. Including universities from different regions of Kazakhstan ensures that the study reflects the variations in educational practices and reform impacts across the country. This geographic spread allows for the examination of regional disparities and the identification of location-specific challenges and successes. This variety helps in understanding how reforms are implemented and experienced differently across diverse institutional contexts. Selecting universities with distinct academic focuses (e.g., technical, liberal arts, research-intensive, and teaching-focused institutions) enables the study to analyze how reforms affect various academic disciplines and educational approaches. This diversity provides insights into the specific needs and responses of different academic communities.

Including universities with different historical backgrounds and stages of development allows for an examination of how past institutional experiences and legacies influence the implementation and effectiveness of current HE reforms. This historical perspective is crucial for understanding long-term trends and changes in

the education system.

The selected universities represent a wide range of stakeholders within the Kazakhstani HE system, including administrators, faculty, students, and policy-makers. This comprehensive representation ensures that the study captures multiple perspectives on the reforms and their impacts, leading to a more nuanced and holistic understanding of the changes taking place.

Practical considerations, such as the willingness of universities to participate in the study and the accessibility of data and interview subjects, also played a role in the selection process. Ensuring that the chosen institutions were cooperative and open to providing detailed information was essential for the success of the qualitative research.

This approach enhances the validity and reliability of the findings, offering valuable contributions to the understanding of how reforms are shaping the higher education landscape in Kazakhstan.

**Table 1** describes the sample and the sampling procedure in this study.

**Table 1.** The sample and sampling procedure in this study.

Participant Type	Number of Participants	Sampling Method	Interpretation
University Administrators	8	Purposive Sampling	Administrators were selected based on their roles in implementing and overseeing higher education reforms. This ensured that the data collected would be relevant and informative for understanding institutional perspectives.
Faculty Members	10	Purposive Sampling	Faculty members were chosen from various disciplines and institutions to provide a broad view of the academic impact of reforms. Their selection was based on experience and participation in reform-related activities.
Students	8	Convenience Sampling	Students from different universities and academic programs were included to capture a range of experiences and perceptions. Convenience sampling was used due to ease of access and willingness to participate.
Policymakers	4	Purposive Sampling	Policymakers involved in fostering and supporting HE policies can offer insight into the goals and difficulties of implementing reforms. This targeted approach ensured the relevance of their input.

The chosen sampling procedures aimed to balance the need for diverse and representative perspectives with practical considerations of accessibility and relevance. This approach allowed the study to collect rich and detailed data that provide a comprehensive view of the impact of the HE reforms in Kazakhstan.

**Table 2** presents the demographic information of the respondents who participated in this study. This includes their roles, age range, gender, and years of experience.

**University Administrators:** The demographic profile of university administrators indicates a group with substantial experience in higher education management. This experience is critical to providing informed perspectives on the implementation and impact of reforms. The slight male predominance aligns with typical gender trends in senior administrative roles.

**Faculty members:** The balanced gender distribution among faculty ensures a diverse range of perspectives on the academic impacts of reforms. The inclusion of both midcareer and senior faculty allows insights into how reforms affect different

stages of academic careers and disciplines.

**Table 2.** Demographic information of the respondents.

Participant Type	Number of Participants	Age Range (Years)	Gender (Male/Female)	Years of Experience	Interpretation
University Administrators	8	40–60	5/3	15–30	Administrators were predominantly in the later stages of their careers, reflecting significant experience in managing and implementing higher education reforms. The gender distribution was slightly skewed toward males.
Faculty Members	10	30–55	6/4	10–25	Faculty members included a mix of mid-career and senior academics, providing insights from various stages of professional development. The gender distribution was balanced, allowing for diverse perspectives.
Students	8	18–25	3/5	N/A	Students were in their early 20s, representing the current generation affected by educational reforms. The gender distribution favored women, offering a slightly more female-centric view of the student experience.
Policymakers	4	45–65	3/1	20–35	Policymakers were senior professionals with extensive experience in educational policy. The gender distribution was predominantly male, reflecting typical gender trends in higher-level policy roles.

Students: The student respondents, predominantly female and in their early 20s, reflect the current demographic of university attendees. Their perspectives are essential to understand how reforms are perceived and experienced by the primary beneficiaries of higher education policies.

Policy makers: The seniority and extensive experience of policy makers provide a strategic viewpoint on the design and implementation of reforms. The male predominance in this group is reflective of broader gender trends in policy making positions.

This demographic information highlights the diversity and representativeness of the sample, ensuring that the study captures a wide range of experiences and perspectives on the transformation of HE in Kazakhstan.

### 2.3. Research design

#### 1) Case Studies

The study includes detailed case studies of five universities in Kazakhstan that have undergone significant reforms. These universities were selected based on their geographical diversity, institutional size, and extent of implemented reforms.

Data collection for each case study involved site visits, observations, and review of institutional documents such as strategic plans, annual reports, and accreditation records.

#### 2) Interviews

Key stakeholders, such as university administrators, faculty, students, and policymakers, participated in semi-structured interviews (Appendix).

Thirty interviews were done to get a variety of viewpoints regarding the effects of reforms in HE. The interview questions were designed to explore themes such as policy implementation, institutional autonomy, quality assurance, internationalization, and industry participation.

Thematic analysis was used to find recurring themes and patterns in the

interviews after they were recorded, transcribed, and examined.

3) Document analysis:

The study involved an extensive review of relevant documents, including government policy papers, educational development programs, research reports, and academic publications.

Document analysis helped contextualize the findings from case studies and interviews, providing a broader understanding of the HE landscape in Kazakhstan.

### 3. Results

Results of semi-structured interviews (see **Table 3**).

**Table 3.** Results of semi-structured interviews.

Theme	Key Findings	Interpretation
Policy Implementation	Variability in reform implementation across Institutions.	Implementing reforms is inconsistent, leading to uneven progress and varying levels of success between universities.
	Challenges include lack of resources, resistance to change, and bureaucratic hurdles.	Institutions face significant obstacles that hinder the effective adoption of reforms, requiring targeted support and resources.
Institutional Autonomy	Limited autonomy in decision-making, especially in financial and administrative matters.	Despite reforms, many universities still operate under centralized control, limiting their ability to innovate and respond dynamically.
	Autonomy is greater in academic matters but less in governance and resource allocation.	Academic freedom is somewhat respected, but true institutional autonomy remains constrained by centralized policies.
Quality Assurance	Quality assurance mechanisms are in place, but vary in effectiveness and consistency.	Quality assurance processes need standardization and stronger enforcement to ensure consistent educational standards.
	Faculty and students participate in quality assurance, but feel their input is undervalued.	Stakeholder participation is present but not sufficiently impactful, indicating a need for more inclusive and valued participation.
Internationalization	Increased opportunities for international exchanges and collaborations.	Efforts to internationalize are showing positive results, with more students and faculty participating in global programs.
	Challenges include language barriers, funding for international programs, and regulatory issues.	Overcoming these challenges requires better language training, funding allocation, and simplified regulations.
Industry Engagement	Strong partnerships with industries in urban areas, but weaker links in rural regions.	Geographic disparities affect the strength of industry engagement, suggesting the need for targeted efforts to boost rural partnerships.
	Internships and industry projects are valued but not uniformly accessible to all students.	Enhancing accessibility to practical experiences for all students is crucial to improve the employability and relevance of education.
Policy Perspectives	Policymakers recognize the importance of reforms, but cite implementation challenges.	There is awareness and support for reforms at the policy level, but practical implementation issues need to be addressed.
	Efforts to balance autonomy with accountability are ongoing, with mixed success.	Finding the right balance between autonomy and maintaining accountability remains a complex and evolving challenge.

### 4. Discussion

This study aimed to evaluate the impact of reforms of HE in Kazakhstan on academic standards, student performance, and institutional efficiency in universities.

Referring to **Table 3**, the results are categorized by the main themes explored during the interviews, and the interpretation of each finding is provided. The uneven implementation of reforms suggests that a one-size-fits-all approach may not be effective. These data are consistent with previous research on tailored strategies, and additional support necessary to address the specific challenges facing different institutions (Lodhi and Ilyassova-Schoenfeld, 2023).

Greater autonomy in financial and administrative matters could empower

universities to innovate and improve educational quality. Policies must evolve to grant more decision-making power to individual institutions.

Furthermore, the current study, like others, emphasizes the importance of standardizing quality assurance processes and valuing stakeholder input can improve the effectiveness of these mechanisms, leading to more consistent and high-quality educational outcomes (Lee et al., 2021).

Continued investment in language training, funding for international programs, and regulatory support will strengthen internationalization efforts and expand opportunities for students and faculty.

Bridging the gap between urban and rural institutions in terms of industry partnerships will ensure that all students benefit from practical experiences. Expanding access to internships and industry projects is crucial.

Policy Perspectives addressing the challenges of policy implementation requires a collaborative approach, involving feedback from universities and continuous adjustments to reform strategies. Balancing autonomy with accountability remains a key focus area for policy makers.

These findings offer a comprehensive overview of the current situation of HE reforms in Kazakhstan, highlighting successes and areas for improvement (Lee and Kuzhabekova, 2019).

#### **4.1. Analysis of key documents on HE in Kazakhstan**

This analysis examines the primary documents that have shaped the landscape of HE in Kazakhstan.

The Program is a comprehensive policy framework aimed at modernizing and improving the education system in Kazakhstan. The program outlines several key objectives:

**Quality Enhancement:** The need to improve the quality of education is emphasized through updated curriculum, advanced teaching methods, and enhanced teacher training programs.

**Infrastructure Development:** Focuses on the development of educational infrastructure, including the construction and renovation of educational facilities.

**Internationalization:** Promotes international cooperation and integration of Kazakhstan's education system with global standards.

**Implications:** The State Program has had a significant impact on the transformation of universities by prioritizing quality and international standards. It has led to the adoption of new teaching methods, the development of modern educational facilities, and the increased collaboration with foreign institutions.

#### **IQAA accreditation standards**

These standards include:

**Institutional Accreditation:** Evaluates the overall performance of universities, including governance, academic programs, student services, and infrastructure.

**Program Accreditation:** Focuses on specific academic programs, assessing their relevance, curriculum, teaching methods, and learning outcomes.

**Implications:** IQAA accreditation standards serve as a benchmark for universities to measure and improve their quality. Institutions that meet these

standards gain credibility and recognition, which can improve their reputation and attract more students. The rigorous evaluation process also encourages universities to continually strive for excellence and innovation in their academic offerings.

## **4.2. Results of the thematic analysis**

Thematic analysis of qualitative data from interviews and document analysis revealed several key themes related to the transformation of universities in Kazakhstan.

### **1) Quality Enhancement and Accreditation**

Many universities have prioritized meeting national and international accreditation standards to enhance their credibility and attract more students.

Institutions are actively involved in continuous improvement processes, including regular reviews of curricula, teaching methods.

### **2) Internationalization and Global Standards**

Universities are forming partnerships with foreign institutions to facilitate student and faculty exchanges, joint research projects, and the adoption of best practices from leading global universities.

The introduction of English-medium programs has been a significant step toward internationalization, attracting foreign students and preparing local students for the global job market.

### **3) Modernization of the curriculum and innovative teaching methods**

There is a strong focus on updating curricula to make them more relevant to the needs and technological advances of the current industry. This includes the integration of practical skills and competencies required by employers (Vreuls et al., 2023).

Universities are increasingly adopting innovative teaching methods.

### **4) Infrastructure Development and Resource Allocation**

Significant investments have been made in the development of modern educational facilities, including state-of-the-art laboratories, libraries, and student accommodation.

Efficient allocation of resources toward critical areas such as research, faculty development, and student support services has been emphasized to improve the overall quality of education.

### **5) Challenges to face**

Despite progress, many universities face funding constraints that limit their ability to fully implement reforms and invest in the necessary infrastructure and resources.

There are noticeable disparities in the quality of education between national and regional institutions, with regional universities often lacking the resources and infrastructure.

Bureaucratic processes and regulatory requirements sometimes hinder the rapid implementation of innovative practices and reforms.

### **6) Strategies Used to Overcome Challenges**

Universities are adopting strategic planning and improved governance practices to ensure efficient use of resources and effective implementation of reforms.

Collaborating with industry partners to design curriculum, provide internships, and offer practical training opportunities for students has proven beneficial in bridging the gap between education and employment.

Engaging with local communities and stakeholders to understand their needs and incorporate their feedback into educational programs has helped universities become more relevant and responsive to social needs (Nasrabadi et al., 2021).

### **Mapping relationships between themes**

The relationships between these themes highlight the interconnected nature of higher education reforms in Kazakhstan. Quality improvement efforts are closely tied to internationalization and curriculum modernization, as universities strive to meet global standards and prepare students for international careers. Infrastructure development and resource allocation support these efforts by providing the necessary facilities and resources.

Challenges such as funding constraints and quality disparities are addressed through strategic planning, industry collaboration, and community involvement.

Thus, the thematic analysis reveals a dynamic and multifaceted process of transformation within Kazakhstan's higher education sector. Universities are making concerted efforts to enhance quality, internationalize their programs, modernize curricula, and develop infrastructure. While challenges persist, the strategies employed by universities demonstrate a commitment to continuous improvement and adaptation to the evolving educational landscape.

### **4.3. Results of triangulation**

The following results emerged from the triangulation process:

#### 1) Convergence of Data

##### Consistency in Quality Enhancement Efforts

Interviews University administrators and faculty consistently highlighted the importance of quality improvement initiatives, aligning with the goals outlined in the State Program for Education Development and the IQAA accreditation standards.

The review of policy documents confirmed a strong emphasis on improving educational quality through updated curricula, advanced teaching methods, and continuous faculty development.

Specific examples from various universities demonstrated the successful implementation of quality enhancement strategies, such as the adoption of new teaching technologies and the establishment of quality assurance units.

#### 2) Internationalization Initiatives

Interviews Respondents frequently mentioned international partnerships and the introduction of English-medium programs as key strategies for aligning with global standards.

The State Program for Education Development and the ministry reports consistently emphasized the need for internationalization and global integration of Kazakhstan's higher education system.

Case studies provided concrete examples of universities that have formed partnerships with foreign institutions, leading to student and faculty exchanges and joint research projects.

### 3) Challenges and Disparities

Interviews University staff and students identified funding constraints, quality disparities between urban and rural institutions, and bureaucratic hurdles as significant challenges.

Government and accreditation reports corroborated these challenges, highlighting the need for a more equitable distribution of resources and streamlined regulatory processes.

Detailed case studies illustrated the impact of these challenges on specific institutions, particularly those in rural areas with limited access to resources and infrastructure.

### 4) Divergence in Data

#### Perception of Bureaucratic Hurdles

Interviews University administrators frequently cited bureaucratic processes as a major obstacle to the rapid implementation of reforms.

Document Analysis: Policy documents and reports did not emphasize bureaucratic hurdles as strongly, focusing more on strategic initiatives and outcomes.

Case Studies: Some case studies indicated that while bureaucracy was a challenge, it was often navigable with strategic planning and stakeholder participation.

### 5) Effectiveness of Industry Collaboration

Interviews Opinions varied on the effectiveness of industry collaboration, with some faculty and administrators reporting successful partnerships, while others cited difficulties in aligning academic programs with industry needs.

Policy documents highlighted industry collaboration as a critical component of higher education reform, but lacked detailed assessments of its effectiveness.

The case studies presented mixed results, with some universities demonstrating strong industry ties and others struggling to establish meaningful partnerships.

### 6) Synthesis of Findings

#### Successful Implementation of Reforms

The triangulation process confirmed that many universities have successfully implemented reforms aligned with the State Program for Education Development and IQAA standards. Quality enhancement and internationalization efforts are particularly notable, with several institutions making significant strides in these areas.

### 7) Persistent Challenges

Despite progress, challenges such as funding constraints, quality disparities, and bureaucratic hurdles persist. These issues were consistently identified in all data sources, indicating a need for ongoing attention and targeted interventions.

### 8) Strategies for Overcoming Challenges

Effective strategies to overcome challenges include strategic planning, industry collaboration, and community engagement. These approaches have been successfully used by some universities, as evidenced by case studies and interviews, and offer a roadmap for other institutions facing similar obstacles.

Therefore, the triangulation process provided a robust verification of the findings, enhancing the credibility and validity of the study. The convergence of data from multiple sources underscored the significant efforts made by universities in

Kazakhstan to enhance quality and internationalize their programs. However, persistent challenges, such as funding constraints and quality disparities, require continued focus and strategic interventions. The divergence in perceptions of bureaucratic hurdles and the effectiveness of industry collaboration highlights the need for further research and tailored approaches to address these issues.

The results identify the key factors that contribute to the effectiveness of these reforms. The reforms have significantly improved academic standards in Kazakhstani universities. The introduction of more rigorous accreditation processes, adherence to international standards, and increased emphasis on research and innovation have collectively raised the bar for academic excellence. The adoption of the Bologna process, which ensures compatibility in the standards and quality of higher education qualifications, has facilitated a smoother integration of Kazakhstani universities into the European Higher Education Area (EHEA). This integration has, in turn, increased the global competitiveness of Kazakhstani degrees.

Student performance has also seen a marked improvement as a result of these reforms. Enhanced curricula, improved teaching methodologies, and greater focus on critical thinking and practical skills have contributed to better academic outcomes. Furthermore, the implementation of more robust assessment and evaluation systems has ensured that students are better prepared for both local and international job markets. The increase in exchange programs and partnerships with foreign universities has provided students with broader perspectives and higher quality education, which is reflected in their academic achievements.

Institutional efficiency has been another area of significant improvement. Reforms have introduced more transparent governance structures and accountability mechanisms, which have streamlined administrative processes and reduced bureaucratic inefficiencies. In addition, the adoption of modern management practices and the integration of technology in administrative functions have further enhanced operational efficiency.

The strong commitment of the Kazakhstani government to educational reform, backed by substantial financial investments and a clear policy framework, has been instrumental in driving these changes. The establishment of the "State Program of Education Development" and other strategic initiatives has provided a solid foundation for continuous improvement.

Collaborations with international organizations and universities have played a crucial role in raising academic standards and improving educational practices. These partnerships have facilitated the exchange of knowledge, resources, and best practices, fostering a culture of continuous improvement (Jakubakynov et al., 2024).

The development and implementation of robust quality assurance mechanisms have ensured that universities maintain high standards in teaching, research, and administration.

Continuous professional development programs for educators have ensured that they are equipped with the latest teaching methodologies and subject knowledge.

In addition, maintaining the momentum of these reforms will require ongoing government support, continued international collaboration, and a persistent focus on innovation and quality assurance (Li, 2022; Ozawa et al., 2024).

These reforms in Kazakhstan have had a profound impact on academic

standards, student performance, and institutional efficiency. The key factors contributing to the success of these reforms include strong government support, international collaboration, robust quality assurance mechanisms, a focus on research and innovation, and professional development for educators. While challenges remain, the future of higher education in Kazakhstan looks promising, provided that these efforts continue and are further refined to address existing gaps (Hwami and Bedeker, 2023).

## **5. Implications for policy and practice**

### **5.1. Policy implications**

The success of recent reforms underscores the importance of sustained government investment in higher education. Policymakers should continue to allocate substantial financial resources to support the ongoing development of higher education institutions, including funding for infrastructure, research, and faculty development.

Establishing robust quality assurance mechanisms has been critical in improving academic standards. Policymakers should focus on further strengthening these mechanisms by regularly updating accreditation criteria, enhancing the capacity of quality assurance agencies, and ensuring that all institutions comply with international standards.

Granting universities greater autonomy has proven to be effective in improving institutional efficiency. Future policies should continue to enhance institutional autonomy while simultaneously implementing strong accountability frameworks to ensure transparency and responsiveness.

Despite the progress made, disparities in access to quality education remain a concern. Policymakers should prioritize initiatives that promote inclusion, such as scholarships and financial aid programs for underrepresented groups, and targeted support for rural and less advantaged institutions.

International partnerships have played a crucial role in raising academic standards and enriching educational experiences. Policies should encourage and facilitate further international collaboration, including exchange programs, joint research projects, and partnerships with global universities.

### **5.2. Implications for practice**

Educators and administrators must continue to adopt and refine innovative teaching practices. Continuous professional development programs should be available to ensure that educators are well equipped to implement these practices effectively.

HE institutions should place a stronger emphasis on research and development. This includes creating an environment that encourages research activities, provides adequate resources and support to researchers, and establishes partnerships with industry and government to address real-world challenges.

Universities should adopt more student-centered approaches to education, ensuring that curricula are relevant to current job market needs and that students

receive the support they need to succeed. This includes career counseling, internship opportunities, and mental health services.

The integration of technology in both administrative and educational processes has enhanced efficiency and accessibility. Institutions should continue to use technology to improve learning experiences, streamline administrative functions, and provide flexible learning options, such as online courses.

Higher education institutions must strengthen their engagement with local communities and industries. This can be achieved through community-based projects, industry partnerships, and initiatives that address local socio-economic challenges. Such engagement not only enhances the relevance of academic programs but also contributes to regional development.

## **6. Limitations and additional future directions**

While the evaluation of recent higher education reforms in Kazakhstan provides valuable insights, there are several limitations to consider.

The analysis relies on available data, which may not capture the full scope of the reforms' impact. Data gaps, especially in areas such as long-term student outcomes and detailed institutional efficiency metrics, may limit the comprehensiveness of the findings.

The impact of reforms can vary significantly between different universities, depending on their size, location, resources, and existing infrastructure. This variability can make it challenging to draw generalized conclusions applicable to all institutions.

The evaluation primarily examines short-term results. Higher education reforms often require extended periods to fully manifest their impact, and the current analysis may not capture the long-term effects and sustainability of the reforms.

External factors such as economic conditions, political stability, and global education trends can influence the results of higher education reforms. The analysis may not fully account for these external variables, potentially confounding the results.

### **Additional future directions**

To address the limitations and build on the current findings, future research and initiatives should consider the following directions.

Tracking the long-term effects of higher education reforms will provide a more comprehensive understanding of their impact. This includes monitoring graduates' career trajectories, ongoing academic performance, and institutional growth over extended periods.

Detailed case studies of individual universities can offer more insight into how specific reforms are implemented and their unique results. This approach can highlight best practices and identify challenges faced by different types of institutions.

Broader data collection: Expanding data collection efforts to include more detailed metrics on student demographics, faculty qualifications, research output, and institutional finances will enhance the robustness of future analyses. Including

qualitative data through surveys and interviews can also provide a richer perspective.

**Comparative analysis:** Conducting comparative studies with higher education systems in other countries can help identify global best practices and contextualize Kazakhstan's reforms within a broader international framework. This can also facilitate learning and collaboration between countries.

**Focus on equity and inclusion:** Future research should place a stronger emphasis on assessing the impact of the reforms on equity and inclusion. This includes examining how reforms affect underrepresented groups, students from rural areas, and those with different socioeconomic backgrounds.

**Interdisciplinary Approaches:** Incorporating interdisciplinary approaches into future research can provide a more holistic view of higher education reforms. Combining insights from education, sociology, economics, and political science can lead to a more nuanced understanding of the factors driving reform success.

## **7. Conclusions**

Recent higher education reforms in Kazakhstan have brought about significant advancements in academic standards, student performance, and institutional efficiency. This article has evaluated these impacts and identified the key factors that contribute to the effectiveness of these reforms. The introduction of rigorous accreditation processes, the adherence to international standards, and the increased focus on research and innovation have collectively elevated academic standards. Enhanced curricula, improved teaching methodologies, and a focus on critical thinking and practical skills have led to better academic outcomes for students. The implementation of robust assessment and evaluation systems, along with increased exchange programs and international partnerships, has further improved student performance, making them more competitive in both local and international job markets. Reforms have introduced more transparent governance structures and accountability mechanisms, streamlining administrative processes, and reducing bureaucratic inefficiencies. Increased institutional autonomy has enabled universities to respond more effectively to the needs of students and faculty, resulting in more efficient and effective management. The integration of modern management practices and technology into administrative functions has further enhanced operational efficiency. Strong government commitment and substantial financial investments have provided a solid foundation for continuous improvement. Collaborations with international organizations and universities have facilitated the exchange of knowledge, resources, and best practices. The establishment of robust quality assurance mechanisms has ensured high standards in teaching, research, and administration. The increased emphasis on research and innovation has contributed to academic standards and socioeconomic development. Continuous professional development programs for educators have ensured high-quality teaching. Although significant progress has been made, several challenges remain, including disparities in access to quality education, differences between national and regional institutions, and the need for comprehensive support systems for students and faculty. Future reforms should focus on addressing these challenges by promoting inclusivity, continuous monitoring and evaluation, and fostering sustainability and resilience in

higher education institutions.

**Author contributions:** Conceptualization, AA and SI; methodology, KB; software, KK; validation, DS, AA and SI; formal analysis, KB; investigation, KK; resources, DS; data curation, SI; writing—original draft preparation, DS; writing—review and editing, AA; visualization, SI; supervision, KB; project administration, KK; funding acquisition, DS. All authors have read and agreed to the published version of the manuscript.

**Funding:** The study was carried out in accordance with the calendar plan of the competition under the grant project of the Ministry of Science and Higher Education of the Republic of Kazakhstan for 2023–2025. BR21882434 on the topic: ‘Systematic approach to monitoring, analysis and assessment of the quality of higher education in Kazakhstan’.

**Conflict of interest:** The authors declare no conflict of interest.

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## **Appendix**

### **Interview Questions**

#### **For University Administrators**

##### 1. Policy Implementation:

- How have the recent higher education reforms been implemented at your institution?
- What challenges have you faced during the implementation process?

##### 2. Institutional Autonomy:

- To what extent does your institution enjoy autonomy in decision-making?
- How has institutional autonomy affected your ability to innovate and improve educational quality?

##### 3. Quality Assurance:

- How do you assess the effectiveness of current quality assurance mechanisms in your institution?
- What steps have been taken to improve academic standards and educational outcomes?

##### 4. Internationalization:

- What initiatives have been undertaken to internationalize your institution?
- How have these initiatives impacted the quality of education and student experience?

##### 5. Industry Engagement:

- How does your institution engage with industry partners?
- What are the outcomes of these engagements in terms of student employability and curriculum relevance?

#### **For Faculty Members**

##### 1. Policy Implementation:

- How have recent reforms impacted your teaching and research activities?
- What support have you received in adapting to these changes?

##### 2. Institutional Autonomy:

- How do you perceive the level of autonomy provided to faculty in academic matters?
- How has this autonomy influenced your work and academic freedom?

##### 3. Quality Assurance:

- What measures are in place to ensure the quality of education at your institution?
- How do you contribute to the quality assurance processes?

##### 4. Internationalization:

- How have international collaborations and exchanges influenced your teaching and research?
- What challenges do you face in participating in international activities?

##### 5. Industry Engagement:

- How do you incorporate industry insights and partnerships into your teaching and research?
- What benefits have you observed from engaging with industry partners?

#### **For Students**

##### 1. Policy Implementation:

- How have recent reforms affected your educational experience?
- What changes have you noticed in the curriculum and teaching methods?

##### 2. Institutional Autonomy:

- How do you perceive the level of student involvement in institutional decision-making?
- What impact has student autonomy had on your learning experience?

##### 3. Quality Assurance:

- How is the quality of education monitored and maintained at your institution?
- How satisfied are you with the academic support and resources available?

4. Internationalization:

- What opportunities have you had for international exchange or study abroad programs?
- How have these opportunities influenced your academic and personal development?

5. Industry Engagement:

- How does your institution prepare you for the job market through industry partnerships?
- What experiences have you had with internships, industry projects, or guest lectures?

**For Policymakers**

1. Policy Implementation:

- What are the key objectives of the recent higher education reforms?
- How do you ensure that these reforms are effectively implemented across all institutions?

2. Institutional Autonomy:

- What policies are in place to enhance institutional autonomy?
- How do you balance autonomy with accountability in higher education?

3. Quality Assurance:

- How are quality assurance standards developed and enforced?
- What mechanisms are in place to monitor and evaluate educational quality?

4. Internationalization:

- What strategies are being employed to promote the internationalization of higher education in Kazakhstan?
- How do you measure the success of these strategies?

5. Industry Engagement:

- How do you facilitate partnerships between universities and industry?
- What role does industry engagement play in shaping higher education policies?