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DIRECTIONS FOR EFFECTIVE USE OF RESOURCES IN IMPROVING THE QUALITY OF SERVICES IN THE HIGHER EDUCATION SYSTEM

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Abstract: Improving the quality of services in the higher education system is ensured by the correct allocation of resources, their strategic management and the use of performance-oriented approaches. This article provides a detailed analysis of the theoretical foundations, practical problems and effective directions of these processes.

Keywords: higher education, quality, economy, financial stability, institution, capital, investment.

Introduction. The issue of service quality in the higher education system is currently one of the most pressing topics, attracting the attention not only of the academic community but also of policymakers and the general public. In the context of globalization, intensifying competition, and the emergence of a knowledge-based economy, higher education institutions are increasingly expected to not only deliver high-quality educational services but also to develop mechanisms for the efficient use of existing resources.

International experience clearly demonstrates that effective management of financial, material-technical, and human resources can significantly improve both the quality of education and the sustainability of higher education institutions. In recent years, several presidential decrees and resolutions in the Republic of Uzbekistan have aimed at fundamentally modernizing the higher education system, aligning it with international standards, and enhancing the quality and efficiency of educational processes.

Notably, current reforms are focused on introducing modern management approaches into the educational process, improving resource efficiency, implementing innovative technologies, and increasing the financial autonomy of universities. In this context, efficient use of resources is understood not merely as cost-saving, but rather as the ability to transform available opportunities into high-quality educational services. From this perspective, one of the key directions for improving service quality in higher education is the effective management of existing resources.

This process involves modernizing the material and technical base of educational institutions, enhancing the qualifications of academic staff, integrating innovative methods into the learning process, and ensuring efficient allocation of financial resources. Moreover, balancing international experience with local realities is of particular importance in the rational use of resources. The issue of efficient resource utilization is closely linked to economic theories, education management concepts, and global best practices.

The term “resources” encompasses a wide range of components, including financial funds, material infrastructure, human capital, time, and information. In higher education

institutions, the optimal allocation and effective management of these resources not only improve the quality of education but also ensure the sustainable development of the entire system.

Financial resources serve as the foundation of educational institutions' activities. As emphasized by T. Schultz in his 1961 theory of human capital, investments in education lay the groundwork for long-term economic growth and innovative development. G. Becker further extended this idea, arguing that educational expenditures lead to higher individual incomes and increased societal productivity. Therefore, directing financial resources toward the development of research activities, improving the qualifications of academic staff, and introducing modern educational technologies is one of the most critical factors in enhancing the quality of services.

The quality of education is closely intertwined with human capital. As noted by UNESCO (2018), strengthening the academic capacity and professional development of faculty members is one of the key determinants of higher education quality. In Uzbekistan, recent efforts have focused on enhancing human resources through international internships for academic staff, attracting foreign experts, and implementing dual-degree programs. These measures represent the practical application of the theoretical ideas put forward by Schultz and Becker regarding human capital development.

The role of material and technical infrastructure in improving the quality of higher education is also significant. The Resource-Based View (RBV) theory proposed by J. Barney provides a useful framework for understanding this aspect. According to RBV, long-term organizational advantage depends on the possession of unique, non-replicable, and distinctive resources. In the context of universities, this is reflected in the availability of modern laboratories, digital libraries, advanced information technologies, and e-learning platforms. Efficient use of these resources not only enhances the quality of the educational process but also boosts the competitiveness of higher education institutions.

The role of innovation in resource utilization deserves particular attention. According to J. Schumpeter's views on economic development, innovation is a primary driver of economic growth and competitiveness. When universities allocate their resources toward scientific discoveries, startup projects, and the development of modern research laboratories, they contribute not only to improved education quality but also to the broader innovative potential of the national economy.

In addition, institutional mechanisms play a critical role in improving education quality. The institutional theory developed by D. North and J. Meyer asserts that organizational efficiency depends not only on material resources but also on institutional and organizational frameworks. Ensuring the efficient use of resources in higher education requires a clear legal foundation, transparent financial management systems, and effective monitoring mechanisms.

Furthermore, the quality of educational services can be analyzed through the lens of marketing approaches. According to the services marketing theory developed by F.

Kotler and J. Keller, efficient resource utilization is closely linked to identifying learners' needs, creating flexible service packages, and applying innovative methods throughout the educational process. This approach not only enhances internal effectiveness but also improves the global competitiveness of educational services.

International practice supports these theoretical foundations. For example, the experiences of Brazil, South Korea, and Germany highlight the importance of collaboration between the state, private sector, and educational institutions as a key condition for the effective use of resources. Integration of public budget allocations with private investments and international grants serves to sustainably improve the quality of higher education services.

The following chart vividly illustrates the inconsistencies between student numbers, faculty capacity, the network of higher education institutions, and financial resources in Uzbekistan—and how these disparities affect the quality of educational services.

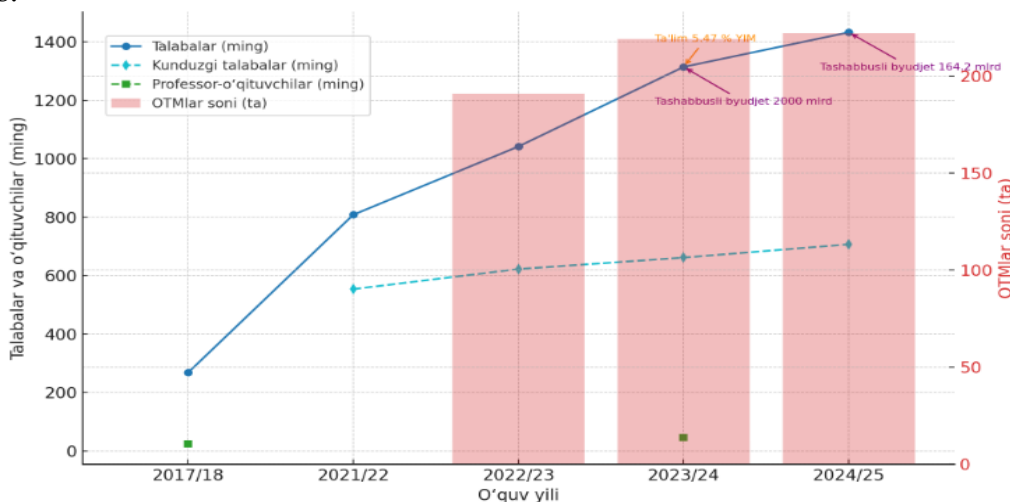


Figure 1. Dynamics of Higher Education Resource Utilisation Indicators in Uzbekistan

Improving the quality of services in Uzbekistan's higher education system is directly linked to the efficient use of resources. Recent demographic, organizational, and financial trends underscore the urgency of addressing this issue. One of the most significant tendencies in the system is the rapid growth in student enrollment. According to official statistics, while there were approximately 268,000 students enrolled in higher education institutions during the 2017/18 academic year, by 2023/24 this number had surpassed 1.3 million. Over this period, the student population increased almost fivefold, placing unprecedented pressure on existing educational resources.

In contrast, the growth in the number of academic staff has been relatively modest. In the 2017/18 academic year, there were 25,100 teaching staff, while in 2023/24 this number rose to 45,400—an increase of about 1.8 times. Consequently, although the number of faculty has grown, it has not kept pace with the surge in student numbers. This has significantly altered the student-to-teacher ratio, raising concerns about

maintaining education quality and increasing the need for efficient resource management.

Under such circumstances, enhancing resource efficiency is not limited to allocating additional funding; rather, it requires strategic planning and rational distribution to sustain educational quality. This involves initiatives such as professional development for faculty, broader application of international best practices, the advancement of innovative and digital learning platforms, and the strengthening of the material and technical infrastructure. These measures help ensure that the increase in student enrollment does not lead to a decline in service quality.

The financial sustainability of the higher education system is another critical factor in improving service quality. In 2023, public expenditure on education accounted for 5.47% of the country's Gross Domestic Product (GDP), which indicates a solid financial foundation for the sector. The allocation of these funds is equally important: investing in infrastructure expansion, equipping scientific laboratories, and integrating modern information technologies creates significant opportunities to enhance the quality of educational services.

In addition, the recent introduction of participatory budgeting mechanisms into the education sector marks a new phase in resource allocation practices. Notably, in 2024, through the "Tashabbusli Budjet" (Initiative Budget) program, over 2 trillion UZS were allocated for the procurement of equipment for educational institutions, alongside 164.2 billion UZS in supplementary resources. This is a practical example of resource distribution based on a bottom-up approach, illustrating not only the efficient use of central budgetary funds but also the importance of responding to the needs of local communities. This participatory model contributes to more targeted and equitable allocation of educational resources.

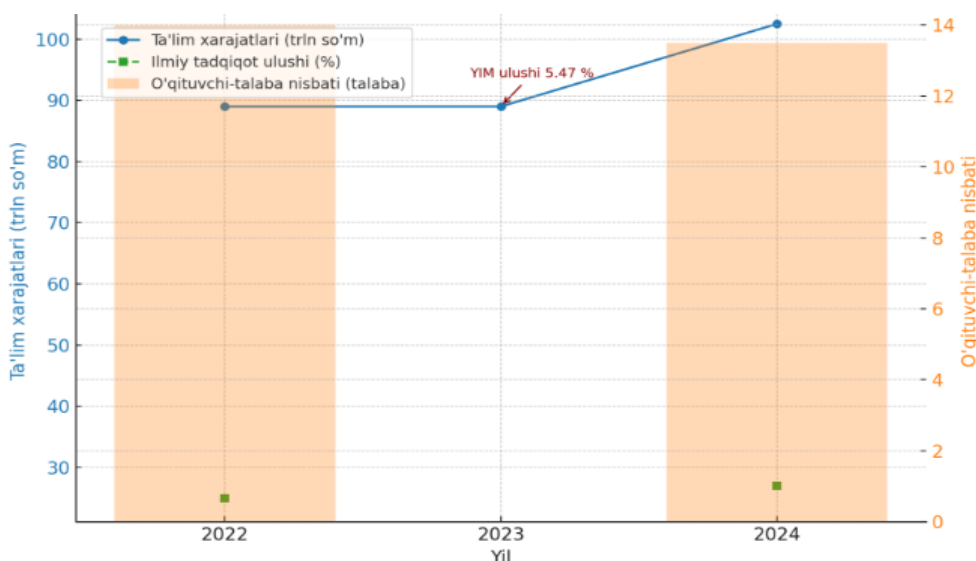


Figure 2. Higher Education Resources in Uzbekistan: Expenditures, Scientific Share, and Their Proportions (2022-2024)

In addition to the demographic factors discussed above, improving the quality of services in Uzbekistan's higher education system must also be examined through the lenses of financial and scientific resource allocation, as well as governance efficiency. As illustrated in the graph (Figure 2), although education expenditures increased from 89 trillion UZS in 2022 to 102.5 trillion UZS in 2024, the direct impact of this growth on educational quality largely depends on how resources are allocated and utilized.

In 2023, education expenditures accounted for 5.47% of the country's Gross Domestic Product (GDP), signaling that the state prioritizes the financing of higher education as a key policy direction. This aligns with economic theories emphasizing efficiency and rational distribution of resources. Furthermore, the share of funding allocated to scientific research increased from 25% in 2022 to 27% in 2024, which supports the theoretical perspectives of T. Schultz and G. Becker regarding human capital. According to their views, investments in education and science contribute to long-term economic growth and national development.

Additionally, I. Schumpeter's concept of innovation-driven growth highlights that allocating resources for scientific research enables universities to function as innovation centers. By investing in R&D, higher education institutions not only raise academic standards but also enhance national innovation capacity.

These trends reinforce the idea that the quality of higher education services in Uzbekistan is intrinsically tied to efficient resource management. The sharp increase in student enrollment, slower growth in academic staff, expansion of the institutional network, and the increasing volume of public funding are all key factors shaping the current landscape. Efficient use of resources, therefore, involves not only attracting additional funding but also ensuring rational allocation and strategic governance of existing resources.

Key strategies in this process include:

- Continuous professional development of academic staff,
- Adoption of international best practices,
- Development of digital education platforms, and
- Modernization of physical infrastructure.

At the same time, financial sustainability remains a critical prerequisite for ensuring education quality. While the 5.47% GDP allocation to education in 2023 is a substantial figure for Uzbekistan, the efficient distribution of these funds and their alignment with strategic priorities are even more pressing.

Moreover, the expansion of participatory budgeting mechanisms marks a new stage in improving resource efficiency. Through the "Tashabbusli Byudjet" (Initiative Budget) program, additional funds have been allocated for equipping educational institutions, allowing for bottom-up resource planning. This model enables needs-based funding, which contributes directly to improving the quality of educational services in response to local community needs.

International experience further supports these reforms. For example, in Brazil, South Korea, and Germany, cooperation between the state, private sector, and

educational institutions has proven to be a key condition for efficient resource utilization. Therefore, Uzbekistan must also integrate public funding with private investments and international grants to achieve sustainable development of higher education services.

In conclusion, improving service quality in Uzbekistan's higher education system requires a comprehensive approach to resource efficiency. This involves harmonizing economic theories, practical reforms, and international experience while ensuring rational use of financial, material, human, and information resources. The introduction of effective governance mechanisms will serve as a foundation for the sustainable enhancement of educational service quality.

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