

Issues of modernizing education, healthcare, and employment sectors to ensure a prosperous life

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Abstract

Purpose: This study aims to examine the vertical alignment of digital innovation between secondary and higher education in Uzbekistan, focusing on how the integration of digitized STEM curricula at the school level corresponds with the digital transformation initiatives in universities.

Research methodology: This article examines the requirements for ensuring societal welfare by analyzing recent reforms in Uzbekistan's education, healthcare, and employment sectors using content analysis, statistical review, and comparative approaches. It also evaluates international best practices and proposes a system of interconnected indicators to assess a prosperous life based on economic opportunity, personal freedom, and social justice.

Results: Efforts to modernize Uzbekistan's healthcare and employment sectors have led to improvements in medical infrastructure, digital health services, job creation, and entrepreneurship support. However, challenges remain in ensuring equitable access to quality healthcare and addressing high levels of informal employment. Bridging the gap between education outcomes and labor market demands, along with expanding medical insurance and preventive care, are key priorities for sustainable societal well-being.

Conclusions: Uzbekistan has implemented key reforms in education, healthcare, and employment to enhance societal welfare, focusing on digital innovation, infrastructure development, and job creation. These efforts have yielded progress, but challenges such as informal employment, gaps in medical service quality, and mismatches between education and labor market needs persist. Ensuring consistent reform implementation and addressing these systemic issues are essential for building a prosperous, educated, and healthy society.

Limitations: This study is limited by its descriptive nature, which primarily outlines policy directions and reform outcomes without conducting in-depth empirical measurements or cross-sectoral impact assessments. Furthermore, while the study highlights progress in education, healthcare, and employment reforms in Uzbekistan, it does not quantitatively evaluate the effectiveness or sustainability of these reforms over time.

Contribution: This study contributes to the discourse on integrated social reform by highlighting the theoretical linkages between education, healthcare, and employment in the pursuit of national well-being.

Keywords: Education, Freedom, Innovative Technology, Justice, Prosperous Life, Society

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1. Introduction

In modern society, a prosperous life for individuals cannot be ensured through random or uncoordinated measures. To guarantee a decent standard of living for members of society, this social goal must be placed at the center of a country's development strategy just as in Uzbekistan and actions in multiple areas must be implemented in a coordinated and harmonious manner. The prospects for ensuring a prosperous life for members of society are closely linked to enriching the content and improving the quality of education (X. Wang & Ruan, 2024). It is well known that without fundamentally reforming the education system and modernizing its content and quality, it is impossible to establish the foundations of a decent standard of living. That is precisely why the President of the country stated: It is absolutely unacceptable to approach such an important and strategic issue as education and upbringing with outdated views, knowledge, and systems. Uzbekistan has embarked on comprehensive educational reforms since 2017, expanding preschool coverage from 28% (2017) to 61% (2023) and extending general secondary education to 11 years. This aligns with efforts to modernize curricula, upgrade infrastructure, and integrate STEM and digital technologies in schools and universities (Shakhnoza, 2021).

Unless we create the most modern and advanced system in this area, we will not be able to solve any of the pressing problems we face. In recent years, wide-ranging reforms have been implemented in Uzbekistan to develop the education sector, improve its quality, and align it with modern requirements. In particular, the number of preschool education institutions has reached 33,942. The coverage rate of preschool education for children aged 3 to 7 has reached 74 percent, and the coverage of school preparation for six-year-old children has reached 93 percent. In addition, the duration of general secondary education has been extended to 11 years. Important measures have been taken to improve the quality of education and upbringing in schools, enhance the material and technical base, and organize the educational process based on modern methods. Significant changes have also occurred in the field of higher education. The number of higher education institutions in the country has increased by 2023, their number reached 213. A significant increase has been observed in their scientific potential and material-technical base. All these changes are regarded as the result of reforms aimed at modernizing the education sector in Uzbekistan.

Despite these advancements, persistent weaknesses remain. Studies highlight superficial reform implementation, disconnected education levels, underdeveloped teacher training, infrastructure disparities, low rural teacher retention, and insufficient systemic alignment with labor market needs. For example, one case study identified key challenges: inadequate educational funding, poor infrastructure, overpopulated classrooms, low teacher salaries, uneven rural teacher distribution, and outdated teaching methodologies (Shaturaev, 2022).

Recent studies emphasize the impact of innovation and digitalization in Uzbekistan's higher education. For example, Abdurashidova, Balbaa, Nematov, Mukhiddinov, and Nasriddinov (2023), found strong links between technology use, student engagement, and institutional modernization. Similarly, secondary level research highlights gaps in practical and industry aligned training within tech curricula. However, no empirical study has yet simultaneously examined how digital innovation within secondary school STEM curricula aligns with higher education digitalization, and how that coherence affects student transition, preparedness, and workforce outcomes in Uzbekistan.

At the same time, in the near future, it will be necessary to further enrich the content of education and strengthen the focus on its quality. In this regard, priority should be given to improving the system of teacher qualification enhancement, raising the quality of educational materials, and widely introducing innovative technologies in the educational process (Hasan, Bazith, Wakka, & Assegaf, 2024). In particular, the times themselves demand increasing the effectiveness of social partnership in the education process. The successful fulfillment of these tasks will undoubtedly bring about a fundamental breakthrough in the well-being of society's members in the near future (Mamadaminova & Khadjikhanova, 2023).

This study aims to examine the vertical alignment of digital innovation between secondary and higher education in Uzbekistan, focusing on how the integration of digitized STEM curricula at the school level corresponds with the digital transformation initiatives in universities. It seeks to evaluate whether such alignment enhances students' academic preparedness and facilitates smoother transitions into higher education and the labor market, thereby contributing to the overall quality and coherence of the national education reform agenda.

2. Literature review

2.1 Literature Review

Modernization theory posits that transitioning societies must transform traditional institutions like education, healthcare, and employment into modern, meritocratic, and bureaucratic structures to achieve sustainable development and prosperity. Within education, modernization entails systematic curriculum redesign, adoption of formal pedagogies, and embedding digital competencies. The theory underscores that without updating educational structures and content, societies struggle to align human capital development with contemporary socioeconomic demands (Nyakomitah, 2024).

The TPACK framework presents a theoretical model for integrating technology into teaching: it posits an intersection of content knowledge (CK), pedagogy (PK), and technology (TK) that teachers must master for effective learning experiences. It stresses that successful modernization in education is not merely about installing tech tools, but about fostering teachers' ability to blend subject knowledge, pedagogical strategies, and technological fluency harmoniously (Kyianytsia, 2021).

Outcome-Based Education (OBE) theory advocates designing educational systems around clear, measurable outcomes instead of traditional content-delivery approaches. Within the modernization context, OBE shifts focus to real-life competencies, providing alignment between what learners should achieve and what is taught and assessed promoting accountability and relevance to labor market needs (Ostern, Perscheid, Reelitz, & Moormann, 2021). Normalization Process Theory (NPT) is a middle-range sociological model explaining how complex healthcare innovations become embedded into everyday practice. It outlines mechanisms coherence, cognitive participation, collective action, reflexive monitoring through which digital and organizational change diffuses effectively. In healthcare modernization, NPT helps frame why some digital transformations integrate sustainably while others remain marginal (Amlung, Huth, Cullen, & Sequist, 2020).

Learning Health Systems (LHS) theory envisions healthcare institutions that continuously cycle through evidence generation, knowledge integration, and practice improvement. It situates modernization as not only digital upgrading, but also institutionalizing data-driven learning loops enabling adaptive, equitable, and quality care. LHS provides a conceptual lens for understanding how healthcare becomes both intelligent and resilient (Ungaro, Di Pietro, Guglielmetti Mugion, & Renzi, 2024). Digital transformation in education is theorized as a socio-technical process driven by economic, social, political, and technological trends (Habibillah & Hadjri, 2024). The theory emphasizes that modernization involves not only technological adoption, but also addressing systemic issues like equity, governance, digital leadership, and infrastructure. It frames modernization as a purposeful, multi-dimensional reform rather than a mere tech rollout (McCarthy, Maor, McConney, & Cavanaugh, 2023).

Theoretical literature on labor and technology highlights that while automation may displace some jobs, it also generates new roles especially in digital, service, and knowledge sectors. Modernization thus involves orchestrating upskilling, reskilling, and labor policies that guide the workforce through transitions. Employment modernization theory emphasizes that institutional and policy frameworks must absorb the dynamic interplay between technology and labor (Stepanenko, Kozinchuk, Polishchuk, Varyanysia, & Kishko, 2022).

2.2 Hypothesis

Integrating modern theories across education, healthcare, and employment such as TPACK, OBE, NPT, LHS, and labor-technology frameworks will result in higher system coherence and individual well-

being: contemporary students and workers in societies that adopt these modernization principles will exhibit improved preparedness, adaptability, and life satisfaction compared to those in less systematically reformed systems.

3. Research methodology

This article identifies and assesses the requirements for guaranteeing the welfare of society's members using methods of systematic, thorough, and comparative analysis. Based on empirical data, the study looks at recent reforms made in the Republic of Uzbekistan in the areas of employment, healthcare, and education. Furthermore, using the content analysis method, the article examines government decisions, presidential decrees and resolutions, official information from pertinent ministries and agencies, normative-legal documents, and statistical data published in national and international mass media. Important aspects of well-being, including the standard of medical care, the quality of education, and the systems in place to guarantee employment, were given top priority during this process. Using a comparative-analytical approach, the study also compared Uzbekistan's experience with international practices, looked at the unique characteristics of sophisticated foreign models, and assessed how well they could be adjusted to local circumstances. Analytical observation, reprocessing of preexisting statistical data, and examination of sociopolitical documents form the basis of the findings reported in this article. The article also seeks to create a system of interconnected indicators that can be used to determine the requirements for a prosperous life that balances economic opportunities, personal freedom, and social justice.

4. Results and discussions

The prospects for ensuring a prosperous life for members of society are closely linked to improving the quality of medical services. In recent years, providing the population with high-quality, modern, and accessible medical care and creating healthy living conditions for all has become a primary goal of the state policy in the healthcare sector in Uzbekistan. To this end, the "Concept for the Development of the Healthcare System of the Republic of Uzbekistan for 2019-2025" was adopted, establishing a solid legal and institutional foundation for reforms in the sector. Over the past years, within the framework of this concept, efforts have been made to modernize medical institutions, equip them with modern medical equipment, and establish new specialized centers. Among these, numerous specialized centers in oncology, cardiology, and perinatology have been established. To improve the quality of medical services in rural areas, family doctor points, rural medical posts, and hospitals were renovated, and qualified personnel were recruited (Noya et al., 2021). Social programs aimed at protecting the health of mothers and children were implemented. Additionally, significant steps were taken in the field of digital medicine: electronic medical records, electronic queue systems, and telemedicine services are being introduced (Nugroho, Hidayat, Rianti, Mutiarahati, & Rosyid, 2024).

However, at a meeting held by the head of state in May 2025, it was also noted that a number of problems persist in improving the quality of medical services. The President of the country emphasized the necessity of strengthening preventive medical care in the near future and expanding access to medical services for the population through the introduction of a medical insurance system. Additionally, the further widespread implementation of digital technologies namely, creating a unified electronic platform in all medical institutions and utilizing artificial intelligence and big data capabilities in diagnostics will improve the quality of medical services provided to members of society and contribute to raising their living standards (M. Wang et al., 2022).

The prospects for ensuring the well-being of members of society are closely linked to increasing the employment level of the population. In recent years, the systematic efforts made in Uzbekistan to boost employment are certainly commendable. It is important to emphasize that the ongoing reforms in this area are aimed at ensuring the well-being of the population. The implementation of projects such as "Every Family is an Entrepreneur", "Youth are Our Future", and the "Women's Register" across the country has significantly expanded opportunities for engaging the population, especially young people and women, in entrepreneurship. Thanks to state and private investments aimed at creating new jobs, industrial zones, service centers, and small business entities have been developed. Based on digital

technologies, mono-centers, electronic labor fairs, and job search platforms were established [12]. As a result of these measures, the process of creating new jobs in the country has become much more intensive, and employers' attention to this issue has significantly increased. At the same time, special agencies were established to create favorable and safe conditions for citizens wishing to work abroad; various professional development courses were organized for them, agreements were concluded with many foreign countries, and the legal foundations for the activities of citizens working abroad were strengthened.

At the same time, several problems remain in the field of ensuring employment. In particular, informal employment remains at a high level. A large number of workers in agriculture, construction, and service sectors operate without official labor contracts, which creates significant obstacles to protecting their labor rights (Kholmuminov, 2022). Additionally, young people who have graduated from educational institutions face difficulties finding employment because their skills do not fully meet the demands of the labor market (Syzdykova, Bimakhanov, Fursova, Makhambetova, & Abikenov, 2022; Zukna & Sassi, 2024). In this regard, there is a need to integrate those engaged in informal employment into formal labor relations and to develop vocational education that corresponds to the needs of the labor market.

5. Conclusion

Assuring the welfare of society's members is a crucial strategic undertaking that calls for careful consideration, methodical execution, and collaboration across multiple sectors. The Republic of Uzbekistan has implemented significant reforms in this area in recent years, especially in the areas of employment, healthcare, and education. These reforms have been essential to the country's success.

The findings of the study demonstrate that a generation of educated, competent, and socially engaged people can be produced by modernizing the educational system, introducing digital and innovative technologies widely, improving teacher qualifications, and fortifying social partnership mechanisms. Through the construction of contemporary facilities, the launch of digital services, and the growth of specialized centers, the healthcare system is gradually expanding the opportunities for the populace to live a healthy lifestyle. However, there are still some issues with the standard of medical care, which suggests that more steps are required to solve them. Particularly, reforms in the employment sector are giving women and young people new options. Projects and initiatives supported by the state are creating thousands of new jobs. Informal employment and the misalignment of educational institutions with the labor market, however, continue to be urgent problems.

In conclusion, it can be claimed that the reforms intended to guarantee prosperity will raise the standard of living for everyone in society if they are implemented consistently. However, fixing the flaws in the current system – in particular, improving service quality and fortifying labor rights guarantees – remains one of the top priorities for the future. A population that is educated, healthy, and employed is the main prerequisite for a prosperous society.

5.1 Limitations and Future Study

This study is limited by its descriptive nature, which primarily outlines policy directions and reform outcomes without conducting in-depth empirical measurements or cross-sectoral impact assessments. Furthermore, while the study highlights progress in education, healthcare, and employment reforms in Uzbekistan, it does not quantitatively evaluate the effectiveness or sustainability of these reforms over time. Future research should adopt a mixed-methods approach to examine how integrated reforms affect individual welfare indicators such as educational attainment, health outcomes, and labor force participation across diverse demographic groups. In particular, longitudinal studies are needed to track the long-term alignment between educational outcomes and labor market demands, as well as the equity of access to quality healthcare.

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References

- Abdurashidova, M., Balbaa, M. E., Nematov, S., Mukhiddinov, Z., & Nasriddinov, I. (2023). The impact of innovation and digitalization on the quality of higher education: A study of selected universities in Uzbekistan. *Journal of Intelligent Systems*, 32(1), 20230070.
- Amlung, J., Huth, H., Cullen, T., & Sequist, T. (2020). Modernizing health information technology: lessons from healthcare delivery systems. *JAMIA open*, 3(3), 369-377. doi:<http://dx.doi.org/10.1093/jamiaopen/ooaa027>
- Habibillah, R., & Hadjri, M. I. (2024). Pengaruh Perkembangan Teknologi di Era Digital Bagi Pengembangan Sumber Daya Manusia di Daerah Tertinggal di Indonesia. *Jurnal Bisnis dan Pemasaran Digital*, 2(2), 115-125. doi:<https://doi.org/10.35912/jbpd.v2i2.2600>
- Hasan, S., Bazith, A., Wakka, A., & Assegaf, A. R. (2024). Optimalisasi Keterampilan Mengajar Guru PAI Berbasis Kompetensi Profesional dan Pedagogik. *Journal of Gurutta Education*, 3(2), 58-68. doi:<https://doi.org/10.52103/jge.v3i2.1792>
- Kholmuminov, S. (2022). Methodological Foundations of Effective Mechanisms to Reduce Informal Employment in Rural Areas. *SCIENCE AND INNOVATIVE DEVELOPMENT*, 5(6), 86-96.
- Kyianytsia, L. L. (2021). The modernization theory paradigm and its discontents: reviewing the contribution and fallings of the modernization theory to social and political research. *Ukrainian policymaker*, 8(8), 41-50. doi:<http://dx.doi.org/10.29202/up/8/5>
- Mamadaminova, N., & Khadjikhanova, S. (2023). Navigating continual progress: Insights into teacher professional development in Uzbekistan. *Pedagogical Quarterly/Kwartalnik Pedagogiczny*, 68(4). doi:<http://dx.doi.org/10.31338/2657-6007.kp.2023-4.7>
- McCarthy, A. M., Maor, D., McConney, A., & Cavanaugh, C. (2023). Digital transformation in education: Critical components for leaders of system change. *Social sciences & humanities open*, 8(1), 100479. doi:<https://doi.org/10.1016/j.ssaho.2023.100479>
- Noya, F., Carr, S., Freeman, K., Thompson, S., Clifford, R., & Playford, D. (2021). Strategies to Facilitate Improved Recruitment, Development, and Retention of the Rural and Remote Medical Workforce: A Scoping Review. *International Journal of Health Policy and Management*, 11(10), 2022-2037. doi:<https://doi.org/10.34172/ijhpm.2021.160>
- Nugroho, R., Hidayat, M., Rianti, E. D. D., Mutiarahati, N. L. A. C., & Rosyid, A. F. (2024). Pemanfaatan Teknologi Digital dalam Pelayanan Kesehatan Publik: Sebuah Tinjauan Analisis Kebijakan. *Jurnal Birokrasi & Pemerintahan Daerah*, 5(2), 277-285. doi:<https://doi.org/10.15575/jbpd.v5i2.28550>
- Nyakomitah, K. (2024). Evaluating the Scope and Utility of Modernization Theory in Contemporary African Development. *Journal of Research in Social Science and Humanities*, 3(11), 1-9. doi:10.56397/JRSSH.2024.11.01
- Ostern, N., Perscheid, G., Reelitz, C., & Moormann, J. (2021). Keeping pace with the healthcare transformation: a literature review and research agenda for a new decade of health information systems research. *Electronic Markets*, 31, 901-921. doi:<http://dx.doi.org/10.1007/s12525-021-00484-1>
- Shakhnoza, M. (2021). New Reforms of Improving Education System in Uzbekistan. *Eurasian Scientific Herald*, 3, 19-22.
- Shaturaev, J. (2022). A Case Study: Insights From The Public Education System Of Uzbekistan. *Academic research in educational sciences*, 3(8), 126-137. doi:https://t.me/ares_uz
- Stepanenko, O., Kozinchuk, V., Polishchuk, N., Varianytsia, L., & Kishko, K. (2022). Modernising the theoretical and practical aspects of national education system development. *Amazonia Investiga*, 11(54), 306-314. doi:<http://dx.doi.org/10.34069/AI/2022.54.06.29>

- Syzdykova, M. B., Bimakhanov, T. D., Fursova, V. V., Makhambetova, M. A., & Abikenov, Z. O. (2022). Position of Higher Education System Graduates in the Labor Market: Search For New Opportunities. *Academic Journal of Interdisciplinary Studies*, 11(3), 50-59. doi:<https://doi.org/10.36941/ajis-2022-0067>
- Ungaro, V., Di Pietro, L., Guglielmetti Mugion, R., & Renzi, M. F. (2024). A systematic literature review on transformative practices and well-being outcomes in healthcare service. *Journal of Service Theory and Practice*, 34(3), 432-463. doi:<https://doi.org/10.1108/JSTP-03-2023-0071>
- Wang, M., Li, S., Zheng, T., Li, N., Shi, Q., Zhuo, X., . . . Huang, Y. (2022). Big Data Health Care Platform With Multisource Heterogeneous Data Integration and Massive High-Dimensional Data Governance for Large Hospitals: Design, Development, and Application. *JMIR Medical Informatics*, 10(4), 1-15. doi:<https://doi.org/10.2196/36481>
- Wang, X., & Ruan, J. (2024). Education Helps to Achieve Shared Prosperity: Evidence from China. *Frontiers in Education*, 9, 1-16. doi:<https://doi.org/10.3389/feduc.2024.1296141>
- Zukna, I., & Sassi, K. (2024). Prospek Sistem Pendidikan Vokasi di Indonesia Abad-21. *NUSRA: Jurnal Penelitian dan Ilmu Pendidikan*, 5(4), 1578-1588. doi:<https://doi.org/10.55681/nusra.v5i4.3254>