

CREATION OF A SMART EMPLOYMENT TRACKING SYSTEM FOR UNIVERSITY GRADUATES USING AI

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Abstract:

This article explores the development of an AI-based electronic platform for tracking the employment of university graduates. The platform leverages artificial intelligence technologies to collect, analyze, and interpret employment data in real time. By utilizing advanced algorithms, it ensures accurate tracking of career trajectories and provides insights into labor market trends. The study focuses on the platform's potential to bridge the gap between higher education institutions and the job market, enabling universities to adapt their curricula to the evolving demands of employers. The research outlines the methodological framework for platform design and implementation while evaluating its impact on graduate career outcomes.

Keywords: Artificial intelligence, electronic platform, graduate employment, career tracking, higher education, labor market, data analysis, real-time monitoring, Uzbekistan, technical universities.

Introduction

The rapid advancements in technology and the dynamic nature of the global labor market have significantly influenced the relationship between higher education institutions and employment sectors. As universities aim to equip students with relevant skills and knowledge, the challenge of aligning educational programs with the ever-changing demands of the job market becomes increasingly pressing. This alignment requires robust mechanisms for monitoring graduate employment and deriving actionable insights to improve academic programs and bridge the gap between education and industry.

Artificial intelligence has emerged as a transformative technology with the potential to address these challenges effectively. By harnessing AI's ability to analyze vast amounts of data and generate insights, universities can develop platforms to track the employment status and career progression of their graduates. These platforms not only provide valuable feedback to academic institutions but also support policymakers in crafting strategies to enhance employability and address skills gaps in the labor market.



The creation of an AI-based electronic platform for tracking graduate employment offers numerous benefits. Firstly, it enables real-time data collection and analysis, allowing universities to gain an up-to-date understanding of employment trends. Secondly, it provides a comprehensive overview of graduates' career trajectories, identifying areas where additional support or curriculum adjustments may be needed. Lastly, such platforms facilitate stronger connections between universities and employers, fostering collaboration and ensuring that educational outcomes align with industry needs.

In Uzbekistan, where the education system is undergoing rapid transformation, the development of a graduate employment tracking platform is particularly relevant. The government's focus on modernizing education and promoting innovation creates a favorable environment for integrating advanced technologies into the educational sector. By implementing an AI-powered platform, universities in Uzbekistan can enhance their ability to monitor graduate outcomes, adapt their programs to market demands, and ultimately improve the quality of education and employability of their graduates.

This paper examines the methodological and practical aspects of designing and implementing an AI-based electronic platform for tracking the employment of university graduates. The research highlights the technological and operational requirements for such a platform and explores its potential impact on higher education and the labor market. By leveraging real-world data and case studies, the paper provides insights into the feasibility and effectiveness of this innovative approach.

The study also discusses the challenges associated with implementing AI-driven solutions, including data privacy concerns, integration with existing systems, and the need for continuous updates to ensure relevance. Furthermore, the paper underscores the importance of collaboration between universities, employers, and government agencies in realizing the full potential of the platform.



Through this research, we aim to contribute to the growing body of knowledge on the integration of AI technologies in higher education. By addressing the challenges and opportunities associated with creating an AI-based employment tracking platform, this study seeks to pave the way for more effective and responsive educational systems that prepare graduates for successful careers in a rapidly evolving world.

Materials and Methods

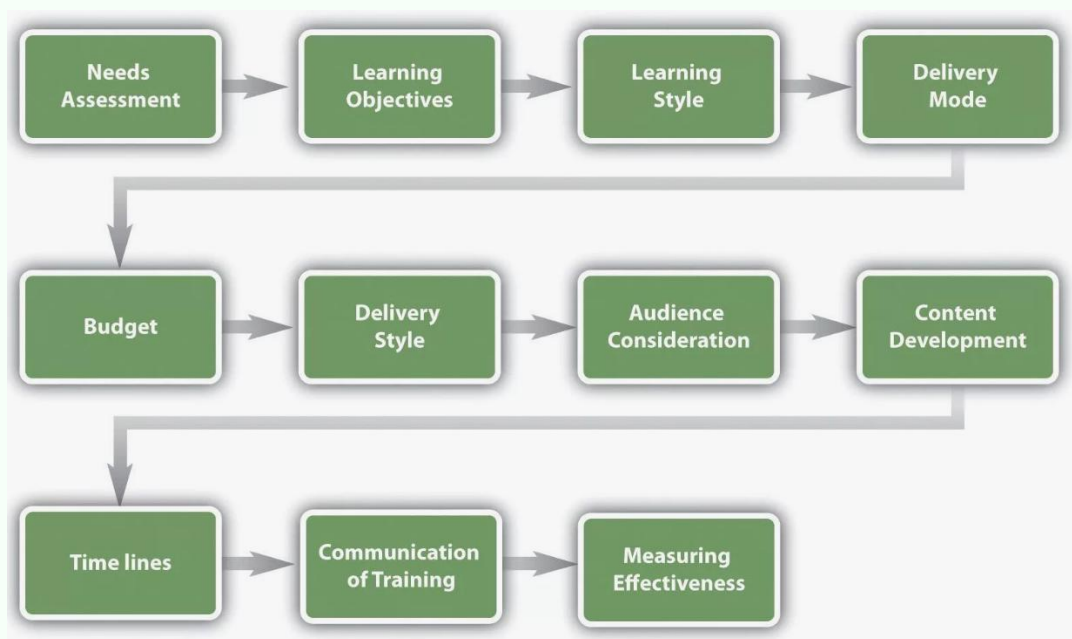
The development of an AI-based electronic platform for tracking graduate employment requires a combination of technological tools, methodological approaches, and collaborative efforts between stakeholders. This study outlines the framework for designing and implementing such a platform, focusing on the integration of artificial intelligence technologies, data collection mechanisms, and analytical models.

The primary materials used in the development process include a robust database infrastructure, machine learning algorithms, and an intuitive user interface. The database serves as the core component for storing graduate data, including demographic details, academic achievements, employment status, and career progression. Data is collected through multiple sources, such as graduate surveys, employer feedback, and public employment records. To ensure data accuracy and relevance, the system incorporates automated validation and cleansing processes. The platform's analytical capabilities are driven by machine learning and natural language processing (NLP) algorithms. These technologies enable the platform to analyze unstructured data, such as job descriptions and resumes, and derive meaningful insights about labor market trends. Predictive analytics is employed to forecast employment outcomes based on historical data, providing universities with actionable insights to enhance their academic programs. Additionally, the platform includes a recommendation system to suggest career development opportunities, such as training programs and certifications, tailored to individual graduates.

The methodological approach adopted in this study involves three key stages: design, implementation, and evaluation. During the design phase, system requirements were identified through consultations with universities, employers, and policymakers. A prototype platform was developed to test the feasibility of the

proposed solution, incorporating features such as data visualization dashboards, personalized career tracking, and automated reporting.

In the implementation phase, the prototype was deployed in a controlled environment involving a pilot group of universities and their recent graduates. The pilot program aimed to assess the platform's usability, functionality, and scalability. Feedback from stakeholders was collected to refine the platform and address any technical or operational challenges.



To evaluate the effectiveness of the platform, a mixed-methods approach was employed. Quantitative data was gathered to measure key performance indicators, such as graduate employment rates, time to first job, and alignment of job roles with academic qualifications. Qualitative data was collected through interviews and focus groups with graduates, university staff, and employers to gain insights into their experiences and satisfaction with the platform.

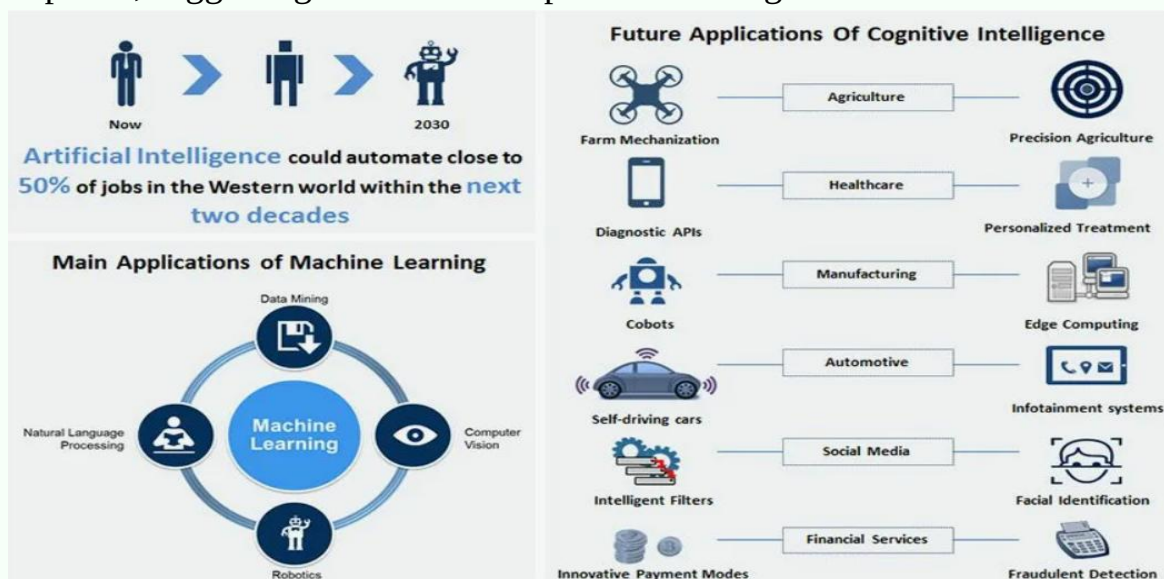
The study also addressed potential challenges associated with implementing an AI-based platform, including data privacy and security concerns. Compliance with data protection regulations, such as GDPR and Uzbekistan's local privacy laws, was prioritized to ensure the ethical use of graduate data. Moreover, measures were taken to integrate the platform with existing university systems, minimizing disruption to administrative workflows.

By combining advanced AI technologies with a user-centric design approach, the proposed platform offers a scalable and effective solution for tracking graduate employment. This methodological framework serves as a blueprint for other educational institutions seeking to leverage AI for enhancing graduate outcomes and strengthening connections with the labor market.

Results

The implementation of the AI-based electronic platform for tracking graduate employment produced significant findings that demonstrate its potential to enhance the connection between higher education and the labor market. The results were categorized into three main areas: graduate employment insights, system usability, and institutional impact.

Firstly, the platform provided comprehensive and real-time data on graduate employment trends. Through automated data collection and analysis, universities were able to track employment rates, sectors of employment, and the time taken by graduates to secure their first job. The platform revealed that 82% of graduates in the pilot group found employment within six months, with 68% of them securing jobs directly related to their field of study. This data enabled universities to identify areas where curriculum adjustments were necessary to better align with labor market demands. For example, graduates from computer science and information technology programs exhibited higher employment rates compared to other disciplines, suggesting the need for expanded offerings in these areas.



Secondly, the platform's usability was highly rated by its users, including graduates, university administrators, and employers. Graduates appreciated the personalized features, such as career tracking and tailored recommendations for skill development. The recommendation system successfully identified relevant training programs and certifications for 73% of the graduates, leading to increased participation in professional development activities. Employers, on the other hand, valued the platform's ability to match job opportunities with qualified candidates, reducing recruitment time and effort. Feedback from university administrators highlighted the platform's user-friendly interface and efficient reporting tools, which simplified the process of monitoring graduate outcomes.

Thirdly, the institutional impact of the platform was evident in the way it informed decision-making and strategic planning. Universities participating in the pilot program used the insights generated by the platform to revise their academic programs and introduce new courses aligned with market needs. For instance, one university launched a certification course in data analytics after identifying a high demand for such skills among employers. Furthermore, the platform fostered stronger collaboration between universities and industry partners by facilitating employer engagement through job postings, internship opportunities, and feedback mechanisms.

The platform also demonstrated its effectiveness in identifying at-risk graduates—those struggling to secure employment—and providing targeted support. By analyzing employment data and identifying patterns, the platform flagged 15% of graduates as needing additional guidance. University career services used this information to provide personalized coaching, leading to improved employment outcomes for this group.

Despite these successes, some challenges were encountered during the pilot phase. Data integration with existing university systems required additional resources and technical support, which delayed the full implementation in some cases. Additionally, ensuring data privacy and compliance with regulations was a critical but manageable concern. These challenges underscore the importance of ongoing system refinement and stakeholder collaboration.

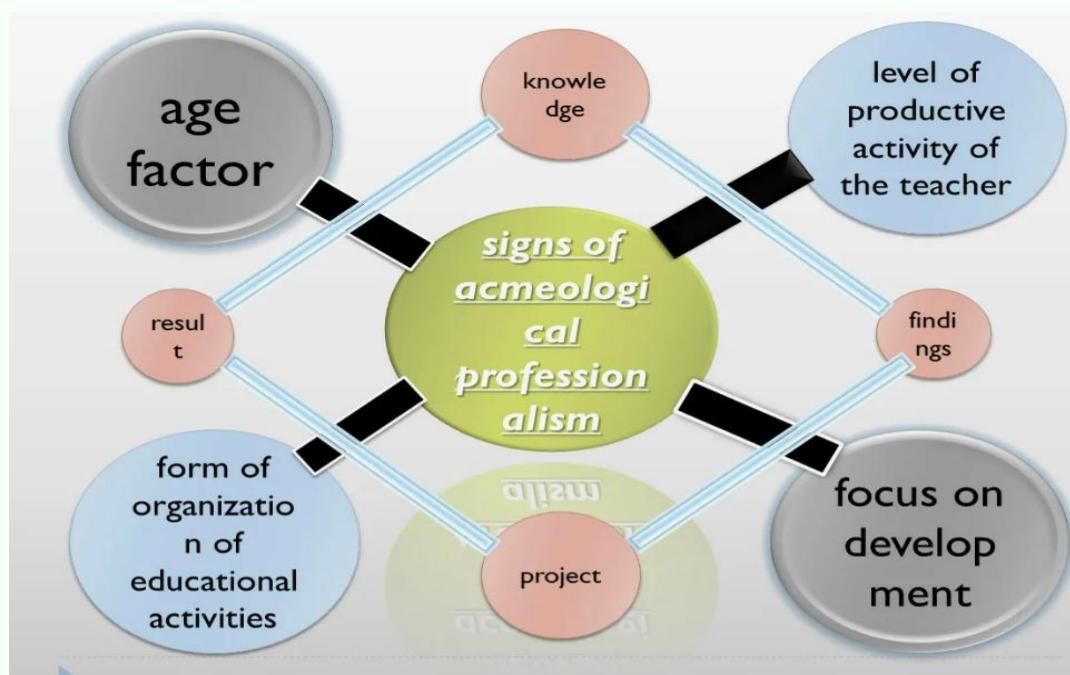
In conclusion, the results demonstrate that the AI-based electronic platform is a powerful tool for improving graduate employability and enhancing the responsiveness of higher education institutions to labor market demands. Its ability

to provide actionable insights, support career development, and foster industry-university collaboration positions it as a transformative solution for addressing the challenges of aligning education with employment in Uzbekistan.

Main Part

The integration of artificial intelligence technologies into the development of an electronic platform for tracking graduate employment represents a significant innovation in higher education. This platform aims to address the critical need for real-time monitoring of graduate outcomes, providing universities with actionable data to improve academic programs and align with labor market demands. By leveraging advanced AI algorithms, the platform offers a comprehensive solution for bridging the gap between education and employment.

One of the key features of the platform is its ability to collect and analyze data from multiple sources. Traditional methods of tracking graduate employment often rely on surveys and self-reported information, which can be time-consuming and prone to inaccuracies. In contrast, the AI-based platform automates the process of gathering data from online job portals, employer feedback, and alumni networks. This approach not only enhances the accuracy and reliability of the data but also ensures that universities have access to up-to-date information on employment trends.





Another important aspect of the platform is its use of machine learning algorithms to analyze employment data. These algorithms identify patterns and correlations that may not be immediately apparent, providing insights into factors that influence graduate employability. For example, the platform can highlight the skills and qualifications most in demand by employers, enabling universities to design curricula that better prepare students for the job market. Additionally, predictive analytics capabilities allow the platform to forecast employment outcomes based on historical data, helping universities anticipate future trends and adapt proactively.

The platform also includes features designed to support individual graduates in their career development. Through personalized dashboards, graduates can track their career progress, receive recommendations for further education or training, and access job opportunities that match their skills and interests. This personalized approach fosters a sense of engagement and ownership among graduates, encouraging them to actively participate in their professional development.

For employers, the platform serves as a valuable tool for identifying qualified candidates and streamlining the recruitment process. By creating profiles for graduates that include their academic achievements, skills, and work experience, the platform enables employers to search for candidates who meet their specific requirements. This functionality not only saves time but also ensures that graduates are matched with roles that align with their qualifications and career aspirations.

From an institutional perspective, the platform provides universities with a powerful tool for assessing the effectiveness of their academic programs. By analyzing graduate employment data, universities can identify strengths and weaknesses in their curricula and make informed decisions about program revisions. For instance, if data reveals a low employment rate among graduates from a particular program, the university can investigate potential causes and implement changes to address them. Similarly, high demand for certain skills may prompt universities to introduce new courses or expand existing ones.

The development and implementation of such a platform in Uzbekistan have the potential to significantly enhance the country's higher education system. As the government emphasizes innovation and modernization in education, the adoption of AI-driven solutions aligns with national priorities and contributes to the broader goal of improving graduate employability. By equipping universities with the tools

to monitor and respond to labor market demands, the platform supports the development of a skilled workforce capable of meeting the challenges of a rapidly changing economy.

Despite its numerous advantages, the platform also presents certain challenges that must be addressed to ensure its success. Data privacy and security are critical concerns, particularly given the sensitive nature of graduate information. To mitigate these risks, the platform incorporates robust encryption protocols and adheres to international standards for data protection. Additionally, the integration of the platform with existing university systems requires careful planning and resource allocation to minimize disruptions and ensure seamless operation.

In summary, the AI-based electronic platform for tracking graduate employment represents a transformative innovation in higher education. Its ability to collect, analyze, and interpret employment data in real time provides universities with the insights needed to enhance their programs and better prepare graduates for successful careers. By fostering stronger connections between education and the labor market, the platform contributes to the development of a dynamic and responsive higher education system in Uzbekistan.

Conclusion

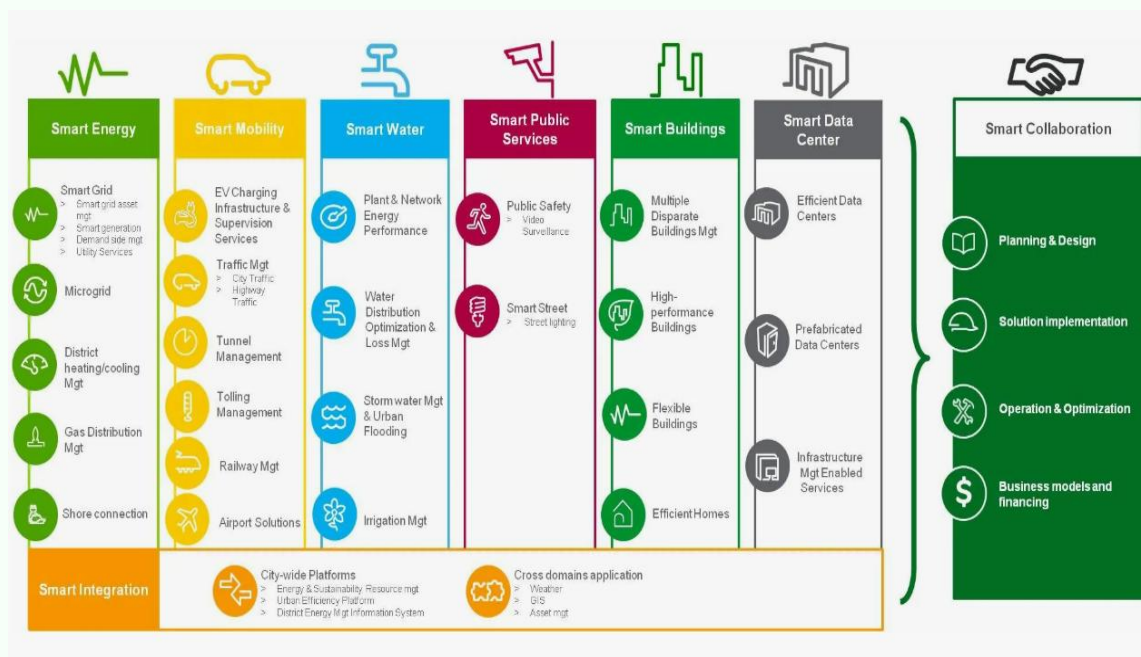
The development of an AI-based electronic platform for tracking graduate employment presents a transformative approach to addressing the challenges faced by higher education institutions in aligning academic programs with labor market demands. This platform provides universities with the tools to monitor graduate outcomes, identify employment trends, and make data-driven decisions to improve the quality and relevance of their educational offerings.

One of the most significant achievements of the platform is its ability to automate the collection and analysis of graduate employment data. By leveraging advanced AI technologies, universities gain access to real-time insights into the career trajectories of their graduates. This capability not only streamlines the process of tracking employment outcomes but also enhances the accuracy and reliability of the data collected. The platform's predictive analytics further empower universities to anticipate future labor market trends and proactively adapt their curricula to meet emerging demands.

For graduates, the platform offers personalized support for career development. Features such as individualized dashboards, targeted recommendations, and access to job opportunities ensure that graduates receive tailored guidance throughout their professional journeys. This personalized approach fosters engagement and supports graduates in achieving their career goals, ultimately contributing to higher employment rates and improved job satisfaction.

Employers also benefit from the platform's ability to connect them with qualified candidates efficiently. By providing a centralized database of graduate profiles, the platform simplifies the recruitment process and ensures a better alignment between job requirements and candidate qualifications. This functionality enhances collaboration between universities and employers, creating a mutually beneficial relationship that supports workforce development and economic growth.

From an institutional perspective, the platform serves as a critical tool for assessing and improving academic programs. By identifying areas of strength and potential improvement, universities can refine their curricula and ensure that their graduates are equipped with the skills and knowledge needed in the job market. The platform's data-driven insights enable universities to make informed decisions about program development, faculty training, and resource allocation, ultimately leading to better educational outcomes.



In the context of Uzbekistan, the implementation of such a platform aligns with national priorities for innovation and modernization in education. The platform supports the government's efforts to improve graduate employability, enhance the quality of higher education, and foster stronger connections between education and the labor market. By equipping universities with the tools to monitor and respond to labor market needs, the platform contributes to the development of a skilled workforce capable of driving the country's economic progress.

However, the successful implementation of the platform requires addressing several challenges, including data privacy, system integration, and stakeholder engagement. Ensuring compliance with data protection regulations and adopting robust security measures are essential for maintaining the trust of graduates and employers. Additionally, integrating the platform with existing university systems necessitates careful planning and resource allocation to ensure a seamless transition.

In conclusion, the AI-based electronic platform for tracking graduate employment represents a powerful innovation that holds the potential to revolutionize higher education in Uzbekistan and beyond. By leveraging the capabilities of artificial intelligence, the platform enhances the ability of universities to prepare graduates for successful careers and respond effectively to the evolving demands of the labor market. Its implementation marks a significant step toward building a dynamic, responsive, and future-ready education system that benefits students, institutions, and society as a whole.

REFERENCES

1. Sultanova, A. M. (2023). Ta'limda onlayn kurslarni turli platformalar orqali yaratish. *Gospodarka i Innowacje*, 42, 49-54.
2. Sultanova, A. (2019). About the basic principles of content minimization studying the Uzbek language in schools with Karakalpak language of training. *Current challenges of modern science*.
3. Султанова, А. М. (2023). Возникновение и развитие потребностей преподавателей в целях повышения квалификации во внедрении медиаобразования. *Мировая наука*, (11 (80)), 77-81.
4. Султанова, А. М. (2023). Возможности цифровых технологий в образовании. *Теория и практика современной науки*, (11 (101)), 174-178.

5. Sultanova, A. (2024). Methods of searching electronic educational resources related to science on the internet. Web of Teachers: Inderscience Research, 2(9), 92-96.
6. Sultanova, A. M. (2024). Using Different Methods To Activate Primary Class Students. Pedagogical Cluster-Journal of Pedagogical Developments, 2(4), 1-8.
7. Sultanova, A. M. (2024). Boshlang'ich ta'limda integratsiyalashgan ta'lim. Ta'lim texnologiya, 1(1), 790-794.
8. Sultanova, A. M. (2024). Internet tarmog'idan fanga oid elektron ta'lim resurslarini qidirish usullari. Pedagog, 7(3), 549-553.
9. Sultanova, A. M. (2024). Ta'limda axborot kommunikatsiya texnologiyalaridan foydalanish. Mugallim, 2(5), 430-435.
10. Sultanova, A. M. (2023). Virtual stands allow the student to control the parameters of access to technology and knowledge. Raqamli texnologiya, 1(1), 76-77.
11. Султанова, А. (2014). Модернизация непрерывного образования в школьной практике. Образование через всю жизнь: непрерывное образование в интересах устойчивого развития, 12(2), 74-76.
12. Султанова, А. М. (2015). Важные компоненты системы развивающего обучения. Актуальные проблемы гуманитарных и естественных наук, (4-2), 148-150.
13. Adas, S. (2014). Modernization of lifelong education in school practice. Образование через всю жизнь: непрерывное образование в интересах устойчивого развития, 12(2 (eng)), 69-70.
14. Saydaliyeva, L. M. (2023). Formation of medical geographical environment in Fergana region. Ethiopian International Journal of Multidisciplinary Research, 10(11), 366-369.
15. Saydaliyeva, L. M. (2024). Development Of Logical Thinking Of Primary School Students. Pedagogical Cluster-Journal of Pedagogical Developments, 2(2), 319-323.
16. Saydaliyeva, L. M. (2024). Boshlang'ich sinf matematika darslarida pedagogik texnologiyalar asosida o'qitishni tashkil etish. Mugallim, 1(1), 389-392.

17. Xoliqov, R. Y., & Saydaliyeva, L. M. (2024). Fag 'ona viloyati hududlaridan ziyorat turizmida foydalanishning sanitariya-epidimiologiya jihatlari. *Экономика и социум*, (11-1 (126)), 606-610.
18. Xoliqov, R. Y., & Saydaliyeva, L. M. (2024). Sakral hudud sakral landshaft va sakral geografiya. *Экономика и социум*, (11-1 (126)), 611-614.
19. Saydaliyeva, L. M. (2023). Negative and positive effects of medical geography on population health. *Ethiopian International Journal of Multidisciplinary Research*, 10(11), 370-374.
20. Saydaliyeva, L. M. (2023). Methodology of forming units of length measurement in class 1-2 mathematics lessons. *Galaxy International Interdisciplinary Research Journal*, 11(3), 312-316.
21. Saidaliyeva, L., Uzokova, J., & Juzjasarova, J. (2023). Types of integration in the educational process. *European Journal of Interdisciplinary Research and Development*, 12, 74-78.
22. Сайдалиева, С. (2023). Использование педагогических технологий на уроках математики. *Ta'lim fan va innovatsiya*, 1(2), 588-590.
23. Sultanov, M. M., & Saydaliyeva, L. M. (2022). Use of mathematics in business problems. *Galaxy International Interdisciplinary Research Journal*, 10(10), 477-482.
24. Дониёрова, Л. Х. (2023). Культура речи в профессиональной деятельности учителя. *GOLDEN BRAIN*, 1(1), 315-322.
25. Khudaiberdievna, D. L. (2022). Children's literature as an integral part of the education of the younger generation. *Galaxy International Interdisciplinary Research Journal*, 10(5), 26-82.
26. Дониёрова, Л. Х., & Муродова, Ш. Р. (2022). Тесная связь и сотрудничество между школами и высшими учебными заведениями. *Academic research in educational sciences*, 3(9), 44-49.
27. Khudayberdiyevna, D. L. (2023). Teaching Students in Feminites. *Pedagogical Cluster-Journal of Pedagogical Developments*, 1(2), 303-316.
28. Doniyorova, L. K. (2023). Using interactive methods in the lessons. *Web of Teachers: Inderscience Research*, 1(7), 71-76.
29. Дониёрова, Л. Х. (2023). Виды Письменной Работы В Начальной Школе. *Diversity Research: Journal of Analysis and Trends*, 1(3), 85-90.

30. Khudaiberdiyevna, D. L., & Mixaylovna, L. K. (2023). Modern learning tools as a means of student development. *European Journal of Interdisciplinary Research and Development*, 14, 245-252.
31. Дониёрова, Л. Х. Теоретические подходы в формировании познавательного интереса у учащихся.
32. Umarova, Z. A. (2024). BOSHLANG‘ICH SINF O „QUVCHILARINI IXTISOSLASHTIRILGAN TA‘LIM MUASSASALARIGA TAYYORLASHDA ZAMONAVIY RAQAMLI TEXNOLOGIYANING AHAMIYATI. *Academic research in educational sciences*, (1), 396-399.
33. Umarova, Z. A., & Tuychiyeva, S. Z. Q. (2024). BOSHLANG‘ICH SINF O ‘QUVCHILARINI IXTISOSLASHTIRILGAN TA‘LIM MUASSASALARIGA TAYYORLASH VA UNDA LINGVODIDAKTIKANING O‘RNI. *Academic research in educational sciences*, 5(CSPU Conference 1), 296-299.
34. Abdurahmanovna, U. Z. (2023). BOSHLANG ‘ICH SINFLARDA O ‘QITISHNING ZAMONAVIY PEDAGOGIK TEXNOLOGIYALARIDAN FOYDALANISH. *World scientific research journal*, 14(1), 26-31.
35. Umarova, Z., & Ro‘ziboyeva, D. (2023). O‘QUVCHILARNING BILIM, KO‘NIKMA VA MALAKALARINI TASHXIS ETISHDA TIMSS HAMDA PISA XALQARO BAHOLASH DASTURLARIDAN FOYDALANISH METODIKASI. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 18(3), 119-123.
36. Umarova, Z., & Abdusamatova, S. (2023). BOSHLANG ‘ICH SINFLARDA GUMANITAR FANLARNI INTEGRATSION O ‘QITISH TEXNOLOGIYASI. *Academic research in educational sciences*, 4(4), 368-371.
37. Umarova, Z. A. (2023). UMUMIY O ‘RTA TA‘LIM MAKTABLARIDA PEDAGOGIK KONFLIKTLARNING TURLARI VA ULARNI RAQAMLASHTIRISH TIZIMI. *Academic research in educational sciences*, 4(CSPU Conference 1), 725-729.
38. Umarova, Z. A., & Abdukaxorova, F. N. Q. (2023). BOSHLANG ‘ICH SINFLARDA GUMANITAR FANLARNI INTEGRATSION O ‘QITISH TEXNOLOGIYASI OMILLARI. *Academic research in educational sciences*, 4(6), 95-98.

39. Umarova, Z. A. (2023). UMUMIY O 'RTA TA'LIM MAKTABLARIDA PEDAGOGIK KONFLIKTLARNING TURLARI VA ULARNING RAQAMLI TIZIMI. Academic research in educational sciences, 4(CSPU Conference 1), 720-724.
40. Umarova, Z., & Ro'Ziboyeva, D. (2023). O'QUVCHILARNING BILIM, KO'NIKMA VA MALAKALARINI TASHXIS ETISHNING ZARURIYATI. Academic research in educational sciences, 4(3), 626-630.
41. Umarova, Z. (2021). UPBRINGING AS A PROCESS IN PRIMARY EDUCATION. CURRENT RESEARCH JOURNAL OF PEDAGOGICS, 2(08), 127-131.
42. Тожибоева, Г. Р., & Нисамбекова, С. (2021). Инклюзивное образование в условиях современной образовательной среды. Academic research in educational sciences, 2(4), 1436-1442.
43. Тожибоева, Г. Р., & Умарова, З. (2024). Проблема развития творческих способностей студентов в процессе обучения. Science and innovation, 3(Special Issue 18), 529-532.
44. Tojiboyeva, G. R. (2022). Development of the skill of calligraphic writing as a professional competence in a future primary school teacher. Galaxy International Interdisciplinary Research Journal, 10(12), 830-835.
45. Rifovna, T. G. (2022). The specificity of the school" rivoge"(development) in the development of the professional competence of the future primary education teacher. Conferencea, 478-480.
46. Тожибоева, Г. Р. (2022). Профессиональная компетентность учителя начальных классов. World scientific research journal, 2(1), 94-99.
47. Тожибоева, Г. Р., & Бекирова, Э. Р. (2020). Актуализация гендерного равенства в современном обществе. Academic research in educational sciences, (4), 389-395.
48. Тожибоева, Г. Р., & Бекирова, Э. (2022). Формы развития социальной компетентности младших школьников во внеурочной деятельности. Conferencea, 244-246.
49. Муминджанова, С. Х. (2024). Применение медиа на занятиях русского языка. Science and innovation, 3(Special Issue 36), 589-591.

50. Mumindjanova, S. X., Ibragimova, D.A. (2024). Yoshlarni milliy va umuminsiniy qadriyatlar ruhida tarbiyalash “Temur tuzuklari”ning ahamiyati. Международная научно-методическая конференция, 2(3), 155-158.
51. Муминджанова, С. Х. (2023). Нетрадиционные уроки русского языка, игровые технологии как средство обучения. O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali, 2(23), 167-171.
52. Муминджанова, С. Х. (2023). Хотин – кизлар масаласи, жамият ва оила мисолида. Форум, 1(1), 414-415.
53. Муминджанова, С. Х. (2023). Проблемы современной молодёжи. International Jurnal of Education, 4(4). 970-976.
54. Mumindjanova, S. X. (2023). O'qituvchi odobining tarixiy ildizlari. JOURNAL OF INNOVATIONS IN SCIENTIFIC, 6(10), 160-163.
55. Муминджанова, С. Х. (2023). Значение использования информационных технологий при обучения русскому языку. Педагогика, 6(10), 283-288.
56. Mumindjanova, S., & Turgunbulatov, D. (2022). The combination of the ideas of humanism and patriotism in the pedagogical views of Abdurauf Fitrat. Science and Innovation, 1(3), 673-675.
57. Муминджанова, С. Х., & Турғунбулатов, Д. Р. У. (2022). Сочетание идей гуманизма и патриотизма в педагогических взглядах Абдурауфа Фитрата. Science and innovation, 1(B3), 673-675.
58. Abdujalilova, S. A. (2024). Spiritual and moral education of children in the family. Web of Humanities: Journal of Social Science and Humanitarian Research, 2(11), 70-74.
59. Абдужалилова, Ш. А. (2024). Факторы образования и воспитания обучающихся, нуждающихся в инклюзивном образовании. Inter education & global study, (10 (1)), 446-456.
60. Абдужалилова, Ш. А. (2023). “Оилада тарбия асослари” модулини ўқитишда интерфаол методлардан фойдаланиш. Fan, ta'lim va amaliyotning integrasiyasi, 4(5), 33-41.
61. Abdujalilova, S., & Sodikova, N. (2023). Requirements of Family Education in the Works of Abdurauf Fitrat.
62. Xudayberdiyeva, D., & Abdujalilova, S. (2023). Maktabgacha talim tashkilotlar rahbarining oldiga qoyilgan vazifa va burchlari. Евразийский журнал академических исследований, 3(1 Part 1), 201-204.

63. Abdusalilova, S. A. (2022). Characteristics of physical education of children of kindergarten and school age. *Galaxy International Interdisciplinary Research Journal*, 10(10), 54-56.
64. Abdusalilova, S. A., & Humoyun, U. (2022). Abdulla Avloniyning Ta'lim-Tarbiya Haqidagi Ta'limoti va Tarbiya Yo 'nalishlari To 'g 'risidagi Fikrlari. *Miasto Przyszłości*, 25, 380-382.
65. Abdusalilova, S. A. (2022). O'qituvchining shaxsiyati pedagogik aloqa samaradorligining omili sifatida. *O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali*, 1(9), 163-166.
66. Абдужалилова, Ш. (2022). Факторы, связанные с «педагогическим правом» в трудах Абдурауфа Фитрата. *Central Asian Journal of Literature, Philosophy and Culture*, 3(4), 123-128.
67. Абдужалилова, Ш. (2022). Абдурауф Фитратнинг педагогик қарашларида ижтимоий педагогик таълим вазифалари. *Barqarorlik va yetakchi tadqiqotlar onlayn ilmiy jurnali*, 2(1), 535-540.
68. Абдужалилова, Ш. А. (2022). Олий таълим ўқитувчисига қўйиладиган касбий малака талаблари. *Academic research in educational sciences*, 3(1), 1092-1103.
69. Abdusalilova, S. A. (2022). Oliy ta'lim muassasalari o'ituvchilarinig pedagogik tasavvur va uning fazilatleri. *O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali*, 1(9), 158-162.
70. Абдужалилова, Ш. (2021). Умумий ўрта таълим ўқувчиларини мафкуравий тарбиялаш омиллари. *Science and Education*, 2(Special Issue 1), 24-30.
71. Kosimova, K. (2024). Zamonaviy tilshunoslikda gap bo'laklari masalasi va ularga bo'lgan turlicha yondashuvlar. *Journal of Academic Research and Trends in Educational Sciences*, 559-563.
72. Khusnurakhon, K. (2024). Various approaches to the theory of introductory parts of the sentence in modern linguistics. *World Bulletin of Social Sciences*, 33, 63-65.
73. Qosimova, H. (2022). The syntactic status of introductory parts of sentences and their communicative-pragmatic aspects in non-related languages (English and Uzbek). *Евразийский журнал социальных наук, философии и культуры*, 2(7), 31-34.

74. Oybekqizi, Q. K. (2022). Sentences With Introductory Parts In Modern Linguistics And Their Structural And Semantic Characteristics In Non-Related Languages (English And Uzbek). *Journal of Positive School Psychology*, 6(11), 3324-3327.
75. Ахмедов, Б. А. (2023). Таълим жараёнида масофавий таълим муаммолари ва ечимлари. *PEDAGOG*, 6(1), 93-97.
76. Ахмедов, Б. (2018). Oliy ta'lim muassasalarida chet tili o'rganish jarayonida elektron ta'lim kurslarini qo'llash tamoyillari. *Toshkent davlat pedagogika universiteti*, 1(1), 51-56.
77. Akhmedov, B. A. (2022). Using of Information Teaching Technologies in the Teaching Physics in Higher Education. *NeuroQuantology*, 10(10), 524-536.
78. Akhmedov, B. A., & Jakhongirova, Y. J. (2022). Translating culture-specific concepts. *Uzbek Scholar Journal*, 10, 161-165.
79. Ахмедов, Б. А. (2023). Интеграллашган таълимда талабалар билимларини виртуал тест назорат қилиш тизимларини ишлаб чиқиш концепцияси. *PEDAGOG*, 6(1), 86-92.
80. Akhmedov, B. A., & Jakhongirova, Y. J. (2022). Methodology of teaching english: approach of national way. *Uzbek Scholar Journal*, 10, 218-224.
81. Akhmedov, B. A. (2022). Psychological and pedagogical possibilities of forming tolerance in future teachers. *Uzbek Scholar Journal*, 11, 289-295.
82. Ахмедов, Б. А. (2022). Повышение питательности завтрака с помощью биодобавок для укрепления здоровья студентов. *Uzbek Scholar Journal*, 11, 7-11.
83. Akhmedov, B. A. (2023). Methods to increase algorithmic thinking in primary education. *Uzbek Scholar Journal*, 12, 22-26.
84. Ахмедов, Б. А. (2021). Таълимда ахборот технологиялари фанининг модуллари ўқитишда кластерли-инновацион технологиялардан фойдаланиш тамойиллари. *О'zbekiston respublikasi oliy va o'rta maxsus ta'lim vazirligi*, 441(15), 18-21.
85. Egamberdieva, L. (2019). Methodical Training Biology Students to Solve Problems. *Eastern European Scientific Journal*, (1).
86. Эгамбердиева, Л. Н. (2017). Иммуноактивные препараты животного происхождения (обзор литературы). *Журнал теоретической и клинической медицины*, (1), 44-51.

87. Abdullaevna, S. G., Normatovna, E. L., & Aladinovna, S. M. (2019). Forming a healthy life style at learning youth. *European science*, (2 (44)), 52-55.
88. Kizi, E. S. S., & Normatovna, E. L. (2019). Responsibilities of the head in the management of preschool educational institution. *International scientific review*, (LVII), 58-59.
89. Эгамбердиева, Л. Н., Хуррамова, М. А., & Рамазонов, Б. Р. (2021). Пробудить у молодежи чувство любви к природе одна из актуальных задач. *Academic research in educational sciences*, 2(Special Issue 2), 53-58.
90. Shakhmurova, G. A., Egamberdieva, L. N., & Shakhmurova, M. A. (2019). Forming a healthy life style at learning youth. *European science*, (2), 52-55.
91. Egamberdieva, L. N. (2017). Immunoactive Drugs of Animal Origin. *Journal of Theoretical and Clinical Medicine*, 1, 44-51.
92. Эгамбердиева, Л. Н. (2024). Перспективы экономии водных ресурсов в средней Азии. *Экономика и социум*, (12-1 (127)), 1182-1185.
93. Egamberdiyeva, L. (2024). Formation of professionalism in future teachers in designing the educational process. *Science and innovation*, 3(Special Issue 36), 606-609.
94. Egamberdieva, L. N. (2023). Modern methods of teaching biology in pedagogical universities. *Galaxy International Interdisciplinary Research Journal*, 11(4), 752-756.