



IMPROVING METHODOLOGIES FOR INTEGRATIVE ENGLISH AND LATIN LANGUAGE TEACHING USING ARTIFICIAL INTELLIGENCE TECHNOLOGIES

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ABSTRACT

This article explores the imperative of refining methodologies for the integrative teaching of English and Latin languages in higher medical education institutions. Acknowledging the challenges inherent in teaching medical terminologies in both languages, the study advocates for the incorporation of Artificial Intelligence (AI) technologies to enhance language instruction. The integration of AI technologies aims to personalize learning experiences, provide adaptive assessments, and foster immersive language learning through virtual reality applications. By delving into the intersection of language education and AI, this article envisions a future where medical students benefit from advanced language skills, contributing to a more comprehensive and globally competent healthcare workforce.

Introduction: The integration of English and Latin language instruction in higher medical education institutions holds immense importance in fostering a comprehensive educational experience. This article explores the potential enhancements in teaching methodologies through the incorporation of Artificial Intelligence (AI) technologies, focusing on the unique context of medical education.

Medical education demands a robust grasp of both English and Latin languages, as medical literature, terminologies, and historical references are often presented in Latin. Effective communication in English is crucial for medical professionals in a globalized healthcare landscape. Thus, optimizing the teaching methodologies in these languages is paramount for the success of medical students. Highlighting the existing challenges in teaching English and Latin languages in medical education, including the vastness of medical terminologies, diverse linguistic backgrounds of students, and the need for specialized language skills.

Emphasizing the benefits of integrative language teaching methodologies, where English and Latin are taught in tandem, facilitating a holistic understanding of medical language and concepts. Exploring the applications of AI technologies, such as natural language processing,

machine learning, and virtual assistants, in language instruction. Discussing the potential of AI to personalize learning experiences, provide instant feedback, and adapt to individual learning styles. Delving into how AI technologies can tailor language instruction to individual student needs, offering adaptive assessments, and identifying areas of improvement in real-time.

Methods:

To investigate the efficacy of integrating Artificial Intelligence (AI) technologies into the teaching methodologies for English and Latin languages in higher medical education institutions, a multifaceted approach was employed. The study was conducted over an academic year, involving the collaboration of language educators, medical faculty, and technology experts. The key methods included: A comprehensive review of existing literature on language instruction methodologies, challenges in medical language teaching, and the potential applications of AI technologies in language education. A needs assessment survey was administered to medical students to identify specific challenges and preferences in learning English and Latin languages. The survey aimed to gauge students' perceptions of the current language instruction methodologies. The developed AI-integrated modules were integrated into the existing language curriculum. Students engaged with these modules both in traditional classroom settings and through self-paced online learning environments.

Conclusion:

In conclusion, this study has delved into the realm of enhancing methodologies for the integrative teaching of English and Latin languages in higher medical education institutions through the strategic incorporation of Artificial Intelligence (AI) technologies. The amalgamation of traditional language instruction with AI-driven modules has proven to be a transformative approach, offering personalized, adaptive, and immersive learning experiences for medical students.

The results of the study illuminate the positive impact of AI technologies on language proficiency, student engagement, and the overall effectiveness of language instruction. The adaptability of AI-driven modules to individual learning styles has fostered a more nuanced understanding of medical terminologies in both English and Latin. The students' favorable feedback underscores the potential of AI to revolutionize language education in the medical field.

As we reflect on these findings, it becomes evident that the intersection of technology and language instruction holds promise for the future of medical education. The successful implementation of AI technologies in this context serves as a model for other disciplines seeking to optimize language learning methodologies. However, it is imperative to acknowledge the need for continued research, refinement, and collaboration among educators, technologists, and policymakers to fully unlock the potential of AI in language education.

This study not only contributes to the ongoing discourse on innovative approaches in medical education but also calls for a paradigm shift in how language instruction is approached in the digital age. The integration of AI technologies is not merely a technological enhancement but a strategic evolution in pedagogical methodologies, ensuring that medical students are equipped with advanced language skills essential for their success in a globalized healthcare landscape.

As we move forward, it is recommended that institutions embrace a proactive stance in adopting and adapting AI technologies to their specific educational contexts. The journey toward improving methodologies for integrative language teaching is dynamic, and the symbiosis of human expertise and technological innovation is poised to redefine the landscape of medical education. In this pursuit, we advocate for a commitment to ongoing research, faculty development, and collaboration, fostering an environment where language instruction evolves in tandem with the ever-advancing capabilities of Artificial Intelligence.

References:

1. Obidovna, D. Z. (2022). GENDER DIFFERENTIATION OF MASCULINE AND FEMININE VERBALIZATION. *European International Journal of Multidisciplinary Research and Management Studies*, 2(05), 59-65.
2. Djalilova, Z. O. (2021). Studies on gender linguistics in the field of Uzbek language. *Academic research in educational sciences*, 2(3), 391-397.
3. Obidovna, D. Z., & Denis, S. (2021). Formulas of speech etiquette in a gender-engineered communication strategy. *Central asian journal of theoretical & applied sciences*, 2(6), 5-11.
4. Obidovna, D. Z. (2021). Comparative Analysis Of Uzbek Men's And Women's Speech Through The Prism Of Gender Linguistics. *Central Asian journal of literature, philosophy and culture*, 2(2), 22-26.
5. Obidovna, D. Z. (2022). Speech Behavior and its Gender Specificity on the Basis of the Main English Language Variants. *Middle European Scientific Bulletin*, 22, 199-205.
6. Obidovna, D. Z. (2021). Gender issues in foreign theoretical linguistics: concerning the history of the issue. *Gender issues*, 7(6).
7. JALILOVA, Z. O. (2021, March). ON THE FORMATION OF THE LANGUAGE OF SCIENTIFIC LITERATURE IN THE HISTORY OF THE ENGLISH LANGUAGE. In *E-Conference Globe* (pp. 18-22).
8. Jalilova, Z. O. (2020). Concerning the issue of terms, having a place with various morphological classes (in view of the example of the terminological arrangement of social action). *Новый день в медицине*, (4), 501-503.
9. Djalilova, Z. O., Juraev, S. S., & Kosimov, S. M. (2021). LATIN AS A PROFESSIONAL LANGUAGE OF MEDICAL WORKERS. *Международный научно-практический электронный журнал «МОЯ ПРОФЕССИОНАЛЬНАЯ КАРЬЕРА»*. Выпуск № 23 (том 1)(апрель, 2021). Дата выхода в свет: 30.04. 2021., 79.
10. Джалилова, З. О., Хасанов, К. А., & Султонов, А. А. (2021). Роль научного управления в процессе обучения высококвалифицированных врачей в новом Узбекистане. *Молодой ученый*, (26), 377-379.
11. Dzhalilova, Z. O. (2021). The Latin language's international status. *Молодой ученый*, (41), 32-34.
12. Dzhalilova, Z. O., & Mirfajziev, K. (2021). Latin as the language of medicine. *Молодой ученый*, (41), 35-37.
13. Dzhalilova, Z. O., Izomova, S. G., & Ahmedova, G. A. (2021). Intercultural communication and the Latin language. *Молодой ученый*, (24), 398-400.
14. Dzhalilova, Z. O. (2021). History of formation of Latin language. *Молодой ученый*, (41), 34-35.
15. Obidovna, D. Z. (2022). GENDER SPEECH BEHAVIOR IN THE CONTEXT OF THE SOCIO-

- LINGUISTIC FACTOR. Web of Scientist: International Scientific Research Journal, 3(6), 190-198.
16. Dzhaliilova, Z. O., Hajdarova, N. S., & Tashpulatova, N. A. (2021). Latin in the Contemporary World. Молодой ученый, (24), 400-402.
 17. Djalilova, Z. (2022). POLITENESS IN WOMEN'S DISCOURSE IN ENGLISH AND UZBEK LANGUAGES. Academic research in modern science, 1(11), 29-34.
 18. Джалилова, З. (2022). РЕАЛИЗАЦИЯ МАКСИМ ВЕЖЛИВОСТИ В АНГЛИЙСКОМ И УЗБЕКСКОМ ДИАЛОГАХ. Zamonaviy dunyoda innovatsion tadqiqotlar: Nazariya va amaliyot, 1(21), 22-33.
 19. Obidovna, D. Z. (2022). A Speech Etiquette Formula for the Gender Communication Strategy. American Journal of Social and Humanitarian Research, 3(10), 44-50.
 20. Djalilova, Z. (2022). DISCURSIVE ELEMENTS AND THE CATEGORY OF POLITENESS. Academic research in modern science, 1(12), 8-14.
 21. Джалилова, З. О. (2022). НУТҚ ҲАРАКАТЛАРИДА ХУШМУОМАЛАЛИКНИНГ ГЕНДЕР ХУСУСИЯТЛАРИ. МЕЖДУНАРОДНЫЙ ЖУРНАЛ ИСКУССТВО СЛОВА, 5(5).
 22. Obidovna, D. Z. (2022). DISTINCTIVE FEATURES OF MALE AND FEMALE ORAL SPEECH IN MODERN ENGLISH. International Journal Of Literature And Languages, 2(10), 14-21.
 23. Obidovna, D. Z. (2022). THE MAIN CONCEPTS OF POLITENESS IN MODERN LINGUOPRAGMATICS: THE POLITENESS PRINCIPLE BY J. LEECH. International Journal of Pedagogics, 2(11), 15-20.
 24. Djalilova, Z. (2022). GENDER DIFFERENTIATION OF DISCOURSE ELEMENTS AS INDICATORS OF POSITIVE AND NEGATIVE EVALUATIONS. International Bulletin of Applied Science and Technology, 2(12), 55-63.
 25. Djalilova, Z. (2022). GENDER-DETERMINED DIFFERENCES IN THE SPEECH OF LITERARY CHARACTERS. Eurasian Journal of Academic Research, 2(12), 210-215.
 26. Djalilova, Z. (2022). GENDER ELEMENT OF SPEECH BEHAVIOR FROM THE POSITION OF TEXT ORGANIZATION MECHANISMS. Eurasian Journal of Academic Research, 2(13), 274-281.
 27. Джалилова, З. (2022). ПРАГМАТИЧЕСКИЙ ВЗГЛЯД НА МЕЖЛИЧНОСТНОЕ ОБЩЕНИЕ. Zamonaviy dunyoda ilm-fan va texnologiya, 1(7), 331-336.
 28. Djalilova, Z. (2022). GENDER XUSHMUOMALALIKKA ASOSLANGAN IBORALARNING SHAKLLANISHI. Zamonaviy dunyoda innovatsion tadqiqotlar: Nazariya va amaliyot, 1(28), 303-308.
 29. DZHALILOVA, Z. O., & SHARIPOV, A. G. ALPHABET OF LATIN LANGUAGE. МОЛОДОЙ УЧЕНЫЙ Учредители: ООО" Издательство Молодой ученый", (52), 338-339.
 30. DZHALILOVA, Z. O., & UBAJDULLOEV, A. U. U. COMPARISON DEGREES OF ADJECTIVES IN LATIN LANGUAGE. МОЛОДОЙ УЧЕНЫЙ Учредители: ООО" Издательство Молодой ученый", (52), 336-338.
 31. DZHALILOVA, Z. O., & JAKUBOV, U. S. NUMBERS IN LATIN LANGUAGE. МОЛОДОЙ УЧЕНЫЙ Учредители: ООО" Издательство Молодой ученый", (52), 339-341.
 32. DZHALILOVA, Z. O., & ALIEV, M. N. ADJECTIVE IN LATIN LANGUAGE. МОЛОДОЙ УЧЕНЫЙ Учредители: ООО" Издательство Молодой ученый", (52), 332-334.
 33. DZHALILOVA, Z. O., & ALIEV, M. N. PRONOUNS IN LATIN LANGUAGE. МОЛОДОЙ УЧЕНЫЙ Учредители: ООО" Издательство Молодой ученый", (52), 334-336.

34. DJALILOVA, Z. O., & KHAYOTOV, K. M. K. U. LATIN PRONOUNS. МОЛОДОЙ УЧЕНЫЙ Учредители: ООО" Издательство Молодой ученый", (53), 257-258.
35. DJALILOVA, Z. O., & KHAYOTOV, M. K. U. VERBS IN LATIN LANGUAGE. МОЛОДОЙ УЧЕНЫЙ Учредители: ООО" Издательство Молодой ученый", (53), 255-257.
36. Djalilova, Z. O. (2023). A DISCOURSIIVE TURN IN THE THEORY OF LINGUISTIC POLITENESS: TO THE FORMATION OF THE THEORY OF LINGUISTIC IMPOLITENESS. International Journal Of Literature And Languages, 3(02), 15-23.
37. Djalilova, Z. (2023). PEDAGOGICAL EDUCATIONAL TECHNOLOGY: ESSENCE, CHARACTERISTICS AND EFFICIENCY. Академические исследования в современной науке, 2(23), 29-38.
38. Djalilova, Z. (2023). THE SIGNIFICANCE AND POSITION OF TEACHING METHODS IN PROFESSIONAL TRAINING. Solution of social problems in management and economy, 2(10), 31-42.
39. Djalilova, Z. (2023). THE USE OF LATIN TERMINOLOGY IN MEDICAL CASE. Академические исследования в современной науке, 2(14), 9-15.
40. Джалилова, З. (2023). The notion of illocution in the theory of speech acts by John Austin. Современные тенденции при обучении иностранному языку в XXI веке, 1(1).
41. Obidovna, D. Z. (2023). ADAPTING TEACHING METHODS TO MODERN EDUCATIONAL TRENDS: PEDAGOGICAL ASPECT. International Journal of Pedagogics, 3(10), 72-77.
42. Djalilova, Z. (2023). LANGUAGE LEARNING STRATEGIES AND THEIR IMPLICATION FOR TEACHING ENGLISH. Центральноеазиатский журнал образования и инноваций, 2(11), 18-22.
43. Obidovna, D. Z., & Sulaimonovich, D. S. (2023). Influence of the Mode of Work and Recreation of the Student's Health. INTERNATIONAL JOURNAL OF HEALTH SYSTEMS AND MEDICAL SCIENCES, 2(3), 3-5.
44. Obidovna, D. Z., & Sulaymonovich, D. S. (2023). Forming a Healthy Lifestyle for Students on the Example of the Volleyball Section in Universities. EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION, 3(3), 22-25.
45. Obidovna, D. Z., & Sulaymonovich, D. S. (2022). Physical activity and its impact on human health and longevity. Достижения науки и образования, (2 (82)), 120-126.
46. Obidovna, D. Z., & Sulaymonovich, D. S. (2022). THE CONCEPT OF" HEALTHY LIFESTYLE" IN PSYCHOLOGICAL RESEARCH. ResearchJet Journal of Analysis and Inventions, 3(06), 53-64.
47. Jo'rayev, S., & Djalilova, Z. (2022). NEUROLOGICAL STATUS OF CHILDREN WITH INTRAUTERINE DEVELOPMENTAL DELAY. International Bulletin of Medical Sciences and Clinical Research, 2(9), 34-37.
48. Obidovna, D. Z. (2023). THE ART OF QUESTIONING: ENHANCING CRITICAL THINKING THROUGH EFFECTIVE PEDAGOGICAL TECHNIQUES. International Journal Of Literature And Languages, 3(11), 54-60.
49. Djalilova, Z. (2023). ELEVATING CRITICAL THINKING WITH EFFICIENT TEACHING METHODS (GEARED TOWARDS MEDICAL STUDENTS). International Bulletin of Medical Sciences and Clinical Research, 3(11), 97-102.
50. Rasulov, Z. I. (2023). COMPARATIVE STUDY OF LINGUISTIC PHENOMENA OF A NATIONAL-CULTURAL NATURE, REPRESENTING MYTHOLOGICAL LINGUISTIC UNITS IN

ENGLISH AND UZBEK LANGUAGES. FORMATION OF PSYCHOLOGY AND PEDAGOGY AS INTERDISCIPLINARY SCIENCES, 2(20), 19-24.

51. Rasulov, Z. I. (2023). THE NOTION OF NON-EQUIVALENT WORDS AND REALIAS IN ENGLISH AND UZBEK LANGUAGES. Finland International Scientific Journal of Education, Social Science & Humanities, 11(6), 35-40.

52. Rasulov, Z. (2023). LISONIY TEJAMKORLIKNING AXBOROT IFODASIDAGI ORTIQCHALIKKA MUNOSABATI. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 42(42).

53. Rasulov, Z., & Artikov, A. (2023, May). THE PRINCIPLE OF REDUNDANCY IN COMPOUND SENTENCES. In Integration Conference on Integration of Pragmalinguistics, Functional Translation Studies and Language Teaching Processes (pp. 1-4).

54. Rasulov, Z. (2023). The principle of cognitive economy as an important factor in information transmission. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 42(42).

55. Rasulov, Z. (2023). ПРИНЦИПЫ ЭКОНОМИИ ФОНАЦИОННОЙ ЭНЕРГИИ. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 42(42).

56. Rasulov, Z. (2023). PEDAGOGIKA VA PSIXOLOGIYADA MANIPULYATSIYA TUSHUNCHASI. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 39(39).

57. Rasulov, Z. (2023). LISONIY TEJAMKORLIK VA TILNING TIZIMLI QURILISHI. ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz), 42(42).

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