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А 43 Актуальні **проблеми навчання іноземних мов для спеціальних цілей:** Збірник наукових статей / Укладач: Л.І. Кузьо. Львів: ЛьвДУВС, 2024. 139 с.

У збірнику статей висвітлено методичні та педагогічні аспекти викладання мов, спрямовані на розвиток мовної культури як важливого елементу забезпечення лінгвістичної безпеки держави. Обговорено підходи до формування іншомовної компетентності правоохоронців України з урахуванням сучасних викликів та потреб, а також міжкультурної іншомовної компетентності, яка набуває особливого значення в освітньому процесі. Значна увага приділена організації самостійної роботи студентів, впровадженню інноваційних методів та форм навчання мов. Досліджено можливості онлайн-навчання як альтернативної форми до традиційних підходів, зокрема його переваги та виклики. Окремі статті присвячено актуальним викликам і перспективам сучасного навчання мов у багатокультурному середовищі, що підкреслює важливість розуміння культурного розмаїття у процесі вивчення та використання мов.

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AI-GENERATED CONTENT FOR LANGUAGE LEARNING

Abstract. *The integration of artificial intelligence (AI) is reshaping the landscape of language education, with AI-generated content emerging as a pivotal component. The following paper examines the current state of research on AI-generated content in language education, discusses the benefits and challenges of this approach, and offers recommendations for future research and development. By leveraging advanced algorithms, AI-powered platforms can create highly personalized learning experiences tailored to individual learner needs, preferences, and proficiency levels. Through the analysis of learner data, these platforms can dynamically adjust content, pacing, and difficulty, optimizing the learning process. Key AI-driven features, such as speech recognition, adaptive testing, and real-time feedback, enhance learner engagement and efficacy. Platforms like Duolingo, Babbel, and Rosetta Stone exemplify successful AI integration in language learning. However, challenges such as data privacy concerns, potential algorithmic biases, and the risk of reduced human interaction must be carefully considered. Future research should delve deeper into the emotional and motivational impact of AI-driven language learning, as well as explore the development of more sophisticated AI models capable of understanding and responding to complex linguistic nuances. A balanced approach that combines the strengths of AI with the expertise of human educators is essential for maximizing the potential of AI-generated content in fostering holistic language development.*

Key words: *AI-generated content, language learning, speech recognition, educational technology.*

Анотація. *Інтеграція штучного інтелекту (ШІ) перетворює сферу вивчення мов, а створений ШІ контент стає ключовим елементом. Ця стаття аналізує поточний стан досліджень у галузі використання ШІ для створення навчального контенту для вивчення мов, розглядає переваги та виклики такого підходу, а також надає рекомендації для подальших досліджень і розробок. Завдяки використанню складних алгоритмів платформи на основі ШІ можуть створювати високоперсоналізований навчальні досвіди, адаптовані до індивідуальних потреб, уподобань і рівнів володіння мовою кожного учня. Аналізуючи дані про навчання, ці платформи можуть динамічно коригувати контент, темп і складність, оптимізуючи процес навчання. Ключові особливості на основі ШІ, такі як розпізнавання мови, адаптивне тестування та зворотний зв'язок у реальному часі, підвищують залученість учнів та ефективність навчання. Такі платформи, як Duolingo, Babbel і Rosetta Stone, є прикладами успішної інтеграції ШІ у вивчення мов. Однак такі проблеми, як конфіденційність даних, потенційні алгоритмічні упередження та ризик зменшення взаємодії з людьми, потребують ретельного розгляду. У майбутніх дослідженнях слід глибше вивчити емоційний і мотиваційний вплив навчання мов на основі ШІ, а також дослідити розробку більш складних моделей ШІ, здатних розуміти та реагувати на складні лінгвістичні нюанси. Збалансований підхід, який поєднує сильні сторони ШІ з експертизою викладачів-людей, має вирішальне значення для максимального використання потенціалу контенту, створеного ШІ, у сприянні комплексному розвитку мовних навичок.*

Key words: *контент, створений штучним інтелектом, вивчення мов, розпізнавання мови, освітні технології.*

Statement of the Problem. The rapid advancement of artificial intelligence (AI) has ushered in a new era of possibilities across diverse fields,including education. Within language learning, AI has shown significant potential to revolutionize traditional pedagogical approaches. While AI-powered language

learning platforms have gained traction, the specific role of AI-generated content in enhancing language acquisition remains relatively under-explored.

While research has underscored the effectiveness of personalized learning and the importance of authentic materials in language education, the ability of AI to generate tailored and contextually rich content presents a new frontier. While AI has demonstrated its capabilities in content generation across domains such as text summarization and machine translation, its application to language learning is still in its nascent stages. This study aims to contribute to this emerging field by investigating the impact of AI-generated content on language learners.

Literature Review. Recent years have witnessed a surge of interest in AI-powered language learning tools and platforms. Research has demonstrated the effectiveness of personalized learning approaches in enhancing language acquisition [1; 2]. Additionally, studies have highlighted the importance of authentic materials in developing language proficiency [3; 4]. However, the specific role of AI-generated content in language learning remains relatively unexplored. A growing body of research has focused on the use of AI for content generation in other domains, such as text summarization, machine translation, and content creation. These studies provide valuable insights into the potential applications of AI in language education. However, there is a need for more research specifically investigating the impact of AI-generated content on language learners.

The aim of the article is to explore the potential of AI-generated content to revolutionize language learning. Specifically, it seeks to:

examine the current state of research on AI-generated content in language education;

discuss the benefits and challenges of using AI-generated content for language learning;

identify key areas for future research and development in this field;

advocate for a balanced approach that combines AI technology with human expertise to optimize language learning outcomes.

By understanding the potential of AI-generated content and addressing its challenges, the article aims to contribute to the advancement of language education and inform future research and development in this area.

Results of the research. AI-generated content has the potential to revolutionize language learning by providing personalized, engaging, and accessible resources. However, it also presents certain challenges that must be carefully considered.

Benefits:

Personalization: AI-powered platforms can tailor content to individual learners' needs, preferences, and learning styles, leading to more effective and engaging learning experiences.

Accessibility: AI-generated content can make language learning more accessible to learners with disabilities or those in remote areas by providing personalized instruction and support.

Efficiency: AI-powered tools can automate repetitive tasks, such as grading assignments or providing feedback, freeing up time for teachers to focus on more personalized instruction.

Engagement: AI-generated content can create interactive and engaging learning experiences, such as gamified language lessons or virtual reality simulations.

Challenges:

Quality: the quality of AI-generated content can vary depending on the underlying algorithms and data used to train the AI models.

Ethical Considerations: the use of AI in language learning raises ethical concerns, such as privacy, bias, and the potential for job displacement.

Human Interaction: overreliance on AI-generated content can limit human interaction and feedback, which are essential for effective language learning.

Expanding on Key Areas for Future Research and Development

1. Improving AI Models:

Contextual Understanding: Developing AI models that can better understand the context of language, including cultural nuances, idioms, and figurative language. Contextual understanding is a crucial aspect of human language comprehension,

allowing us to interpret meaning based on the surrounding words, phrases, and cultural context. For AI-generated language learning systems to be truly effective, they must also be able to understand the context of language.

Natural Language Generation: Enhancing AI's ability to generate natural-sounding and culturally appropriate language content. Natural language generation is a subfield of artificial intelligence that focuses on the ability of computers to generate human-like text. In the context of language learning, NLG can be used to create personalized, engaging, and informative content that helps learners to practice and improve their language skills.

Error Correction: Improving AI's capacity to identify and correct errors in learner-generated content, providing more effective feedback. Error correction is a critical component of language learning, providing learners with valuable feedback on their progress and helping them to identify and rectify errors in their language use. AI-powered language learning platforms can play a significant role in automating the process of error correction, providing learners with instant feedback and personalized guidance.

2. Addressing Ethical Concerns:

Bias Mitigation: Developing techniques to mitigate biases in AI-generated content, ensuring that it is fair, equitable, and inclusive. AI-generated content, while powerful and versatile, can inadvertently perpetuate biases present in the data it is trained on. These biases can manifest in various ways, such as gender stereotypes, racial discrimination, or cultural insensitivity. To ensure that AI-generated language learning materials are fair, equitable, and inclusive, it is essential to develop techniques to mitigate these biases.

Data Privacy: Implementing robust data privacy measures to protect learner data and prevent misuse. Data privacy is a critical concern in the age of AI, especially when it comes to the collection and use of personal data. In the context of language learning, AI-powered platforms often collect and process a significant amount of learner data, including personal information, learning history, and performance

metrics. Protecting this data from unauthorized access, misuse, and disclosure is essential to ensure the privacy and security of learners.

Transparency: Ensuring transparency in the development and use of AI-generated content, including clear explanations of how algorithms work. Transparency is essential for building trust in AI-powered technologies, especially in the context of language learning. By being transparent about the development and use of AI-generated content, we can help learners understand how the technology works, build trust in its capabilities, and address concerns about bias, fairness, and accountability.

3. Integrating AI with Human Expertise:

Teacher Collaboration: Exploring ways to integrate AI-generated content into teacher-led instruction, providing teachers with tools and resources to support their teaching. While AI can provide valuable tools and resources for language learning, it is essential to recognize the unique role that human teachers play in the educational process. By effectively integrating AI-generated content into teacher-led instruction, we can create more personalized, engaging, and effective learning experiences.

Personalized Learning Paths: Developing AI-powered platforms that can create personalized learning paths based on individual learner needs and preferences. Personalized learning paths are a key component of effective language learning, allowing learners to progress at their own pace and focus on areas where they need the most support. AI-powered platforms can play a crucial role in creating personalized learning paths by analyzing learner data, identifying individual strengths and weaknesses, and tailoring content and instruction accordingly.

Adaptive Assessment: Implementing adaptive assessment techniques that can adjust the difficulty level of content based on learner performance. Adaptive assessment is a personalized learning approach that adjusts the difficulty level of content based on a learner's performance. By tailoring assessments to individual learners, adaptive assessment can help to optimize learning outcomes, increase engagement, and provide valuable insights into learner progress.

4. Measuring Effectiveness:

Outcome-Based Assessment: Developing assessment tools that measure not only language proficiency but also broader learning outcomes, such as critical thinking, problem-solving, and cultural awareness. Traditional language assessments often focus solely on measuring language proficiency, such as grammar, vocabulary, and pronunciation. However, to fully evaluate the effectiveness of language learning programs, it is essential to assess broader learning outcomes, including critical thinking, problem-solving, and cultural awareness.

Long-Term Impact: Conducting longitudinal studies to evaluate the long-term impact of AI-generated content on language learning outcomes. While short-term studies can provide valuable insights into the immediate effects of AI-generated content on language learning, it is essential to conduct longitudinal studies to evaluate the long-term impact of this technology. Longitudinal studies can help to identify both the benefits and potential drawbacks of using AI-generated content in language learning over time.

Learner Satisfaction: Gathering feedback from learners to assess their satisfaction with AI-generated content and identify areas for improvement. Gathering feedback from learners is essential for understanding their experiences with AI-generated content and identifying areas for improvement. By actively seeking learner input, we can ensure that AI-powered language learning tools are designed to meet their needs and preferences.

By addressing these areas, future research can contribute to the development of AI-generated content that is effective, ethical, and beneficial for language learners.

While AI offers significant potential to enhance language learning, it is essential to recognize its limitations and maintain a balanced approach that combines AI technology with human expertise. AI can provide personalized content, adaptive assessments, and efficient feedback, but it cannot fully replicate the complex nuances of human interaction and cultural understanding. Human educators can offer guidance, motivation, and cultural context that AI cannot, fostering a more engaging and meaningful learning experience.

For example, AI can generate personalized practice materials and provide instant feedback on learner errors, but it may struggle to understand the nuances of cultural references or to provide empathetic support. Human educators, on the other hand, can offer cultural insights, explain complex concepts in a way that is tailored to individual learners, and provide emotional support and encouragement. By combining the strengths of AI and human expertise, we can create a more comprehensive and effective language learning experience.

A balanced approach that integrates AI technology with human expertise can ensure that learners receive the best possible support while addressing the limitations of AI-driven instruction. This approach can help to create more equitable and inclusive learning environments, where all learners have access to high-quality language instruction.

Conclusion. The integration of AI-generated content into language learning has the potential to revolutionize the way languages are taught and learned. By leveraging the power of AI, we can create personalized, engaging, and effective learning experiences that cater to the individual needs and preferences of learners.

However, the successful implementation of AI-generated content requires a balanced approach that combines AI technology with human expertise. While AI can provide valuable tools and resources, it cannot fully replicate the complex nuances of human interaction and cultural understanding. By integrating AI with human guidance, we can create more effective and equitable language learning environments.

Future research and development should focus on addressing the challenges and opportunities presented by AI-generated content, such as improving AI models, mitigating biases, ensuring data privacy, and promoting transparency. By investing in these areas, we can create AI-powered language learning tools that are not only effective but also ethical, inclusive, and beneficial for learners of all ages and backgrounds.

References

1. Ulfa, K. (2023). The Transformative Power of Artificial Intelligence (AI) to Elevate English Language Learning. *Majalah Ilmiah METHODA*, *13*, 307-313. doi:10.46880/methoda.Vol13No3. p. 307-313

2. Guo, Y. (2024). Enhancing Language Acquisition through Personalized Learning: the Role of Collaborative Filtering and Recommender Systems in TESOL. *Applied and Computational Engineering*, *57*, 200-205. doi:10.54254/2755-2721/57/20241333

3. Faiz, A. (2023). The Impact of Integrating Authentic Materials on Learner Engagement and Language Development. *TRANSTOOL*, *2*(4), 321-328

4. Treve, M. (2023). Examining The Impact Of Using Authentic Materials On Esl/Efl Learners. *International Journal of Empirical Research Methods*, *10.59762/ijerm205275791120231005151352*.

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TECHNOLOGIES OF TEACHING SPEAKING IN NON-LINGUISTIC UNIVERSITIES AT THE INITIAL STAGE

Abstract. *One of the active types of language activity is speaking. Since speaking itself is the main indicator of foreign language mastery, its successful learning depends on a number of factors, both educational and psychological. The article identifies objective and subjective reasons that hinder the development of speaking skills in a foreign language, and offers various ways to overcome possible difficulties during learning to speak, in particular through independent work using*