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# THE SYNERGY PARADIGM: THE POTENTIAL OF INFORMATION TECHNOLOGY IN UNIVERSITY LANGUAGE EDUCATION

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**Summary.** *The world we live in today is highly advanced in technology. Information technology has transformed many aspects of our lives, education included. At the university level, IT plays a significant role in improving the learning experience for foreign language students by providing valuable tools and resources. This article discusses how IT currently helps language learning, ways to enhance it further, and the future prospects of artificial intelligence in language study.*

**Key words:** *information technology, artificial intelligence, education, university, languages study.*

Introduction. Studying foreign languages at the university level is of utmost significance for students due to multiple reasons. Firstly, in today's globalized world, proficiency in foreign languages unlocks a myriad of possibilities for personal and professional development. Acquiring expertise in a foreign language enables students to communicate and establish connections with individuals from diverse cultures, fostering intercultural comprehension and worldwide cooperation. Secondly, engaging in the study of foreign languages equips students with invaluable linguistic and cognitive proficiencies. The acquisition of a new language enhances critical thinking, problem-solving, and analytical aptitudes. It enhances memory, attention to minutiae, and multitasking abilities. These cognitive advantages transcend language acquisition itself and exert a positive influence on overall academic achievement (Gottlieb, 2006, p. 56).

Moreover, studying foreign languages at the university level grants students a deeper comprehension of their own language and culture. Comparative linguistics and cultural studies empower students to contemplate their own linguistic and cultural identity, questioning assumptions and broadening their perspective. This linguistic and cultural consciousness heightens intercultural competence which is

known to be the basis for professional mobility (Glaser & Byram, 2007). Foreign language competencies hold substantial value in the job market (Irwin, 1997, p. 593).

Multinational corporations, global organizations, and even small enterprises increasingly seek individuals with language proficiency to engage in global trade and collaboration. The aptitude to communicate in diverse languages confers a competitive advantage upon students, expanding their career prospects and enhancing their marketability. Studying foreign languages at the university level enables students to access an abundance of literary and cultural heritage. Language proficiency empowers students to peruse literary works, view films, and engage with other artistic expressions in their original language, thereby attaining a more profound comprehension and admiration of varied cultures. Studying foreign languages facilitates personal growth and instills a sense of self-discovery. The process of learning a new language necessitates perseverance, discipline, and adaptability. It challenges students to step beyond their comfort zones, embrace novel perspectives, and cultivate a growth mindset. Language learning fosters personal development, augments self-assurance, and nurtures lifelong learning habits.

**Results.** Learning foreign languages at the university level has been greatly facilitated nowadays by advancements in Information Technology (IT), which extremely contributes to the educational process (Gudkova, 2020, p. 147). As the educational process is considered to be a complex system, this contribution should be explored in different directions, among which the following ones are the most significant: remote lessons via Zoom/Teams/Google Meets; mobile applications for language studying like Duolingo; online book and media libraries; educational platforms like Moodle; artificial intelligence.

**Remote Lessons via Zoom/Teams/Google Meets.** The emergence of video conferencing platforms such as Zoom, Microsoft Teams, and Google Meets has significantly transformed language learning at the university level. These tools provide the opportunity for remote lessons, allowing students and language instructors to connect and engage in real-time interactions, irrespective of their geographical location. Remote lessons via these platforms enable students to practice conversational skills, participate in group discussions, and receive immediate feedback from instructors. This flexible mode of learning has eliminated the limitations of physical proximity, providing students with the convenience of attending language classes from anywhere with an internet connection.

**Mobile Applications for Language Studying.** Mobile applications have become indispensable tools for language learning, offering flexibility and convenience to students. Duolingo is a popular language learning app that provides interactive exercises, vocabulary building activities, and language proficiency assessments. Its gamified approach keeps learners motivated and engaged while offering flexibility in terms of self-study and supplementary practice. Mobile language learning applications like Duolingo allow students to access language lessons anytime and anywhere, making language learning more accessible and personalized.

**Online Book and Media Libraries.** Online libraries have revolutionized language learning by providing access to a vast array of digital resources. Students can access e-books, audiobooks, and online dictionaries to enhance their vocabulary and

language skills. Project Gutenberg is a notable online library that offers more than 50,000 free e-books in multiple languages (Evans, 2021, p. 180). This platform allows students to explore various literary works in their target language. Additionally, platforms like LingQ provide interactive reading materials with language learning tools, facilitating the immersion of students in authentic texts while offering translation and vocabulary support.

Educational Platforms like Moodle. Educational platforms like Moodle have revolutionized the delivery and management of foreign language courses at the university level. Moodle, an open-source learning management system (LMS), enables instructors to create interactive online language courses, share resources, and assign tasks to students. Through Moodle, language instructors can design multimedia-rich lessons, facilitate discussions through forums, and encourage collaborative activities. The platform serves as a centralized hub for organizing course materials, tracking student progress, and administering assessments, enhancing the efficiency and effectiveness of language learning (Moodle – Open-source learning platform | Moodle.org, b. d.).

To sum up the current situation at universities, it is worth emphasizing that IT has played a significant role in enhancing foreign language learning experiences at the university level. Remote lessons via video conferencing platforms offer flexibility and real-time interaction. Mobile applications provide convenient access to language learning resources. Online libraries grant students access to a wealth of digital materials. Educational platforms like Moodle facilitate course delivery and management. Through the integration of IT tools and platforms, universities can create more engaging and effective foreign language learning environments for their students.

There are some ways to enhance language learning at universities. With no doubt we can state that practice is the best technique for mastering any subject. Universities can provide such kind of practice by increasing international collaboration with other universities. By utilizing the technologies outlined above, it is feasible to create a universal educational platform that can be used by various universities worldwide.

Professors can improve education and offer different viewpoints by using streaming platforms to give lectures. Students can enhance their listening and speaking abilities, and also develop their professional vocabulary through this approach.

Communication among students is a crucial aspect of university education as well. Collaborating on projects with students from various countries is essential for developing skills that will be valuable in a post-COVID-19 world. It also highlights the significance of studying different languages.

Artificial intelligence. In recent years, artificial intelligence (AI) has revolutionized various spheres, and education is no exception. One area where AI has shown immense potential is in the realm of foreign language study. It's important for universities to integrate AI support as soon as it's advanced enough. With the help of AI-powered tools and platforms, language learners can now enhance their learning experience, receive personalized instruction, and make significant progress in their language skills. As an example, there is a World-class AI for education by Khan

Academy that mimics a writing coach by giving prompts and suggestions to move students forward as they write, debate, and collaborate in exciting new ways (Khanmigo Education AI Guide | Khan Academy, b. d.; TED, 2023).

AI enables adaptive learning systems that can personalize the language learning experience for individual students. By analyzing vast amounts of data, AI algorithms can assess the learner's strengths, weaknesses, and learning style. Based on this analysis, the AI system can tailor the learning content, pace, and exercises to suit the student's specific needs. This personalized approach enhances engagement, boosts motivation, and maximizes learning outcomes.

One of the most challenging aspects of learning a foreign language is mastering pronunciation. AI-based speech recognition technology can provide learners with instant feedback on their pronunciation accuracy. By comparing the learner's speech to native speakers' models, AI systems can identify errors, suggest improvements, and help learners refine their pronunciation skills. This real-time feedback allows for immediate correction and reinforcement, leading to more effective language acquisition.

AI-powered chatbots and virtual assistants equipped with natural language processing capabilities provide learners with opportunities for conversational practice. These virtual language partners can engage in interactive dialogues, respond to questions, and provide guidance in real-time. Learners can practice their speaking and writing skills, receive immediate feedback, and gain confidence in their ability to communicate in a foreign language.

AI can enhance language learning through intelligent tutoring systems that offer customized lessons and exercises. These systems employ AI algorithms to adapt the learning materials to the learner's proficiency level, track progress, and provide targeted feedback. By analyzing the learner's performance and identifying areas for improvement, AI tutors can offer personalized recommendations, additional practice resources, and adaptive exercises, ensuring efficient and effective language learning.

Artificial intelligence has emerged as a powerful tool to enhance foreign language studying. Through adaptive learning, personalized instruction, speech recognition, conversational practice, and intelligent tutoring systems, AI offers innovative ways to engage learners, improve their language skills, and foster autonomous learning. Khan Academy AI serves as an excellent example of how AI can revolutionize language learning by providing personalized instruction and leveraging advanced technologies. As AI continues to advance, its potential to transform language education is vast, opening new horizons for learners around the world.

**Conclusion.** The use of IT has become an essential aspect of language education at universities. With the help of remote classes, mobile apps, online libraries, and educational platforms, students can enjoy a more interactive learning experience, greater flexibility, and access to resources. Additionally, promoting international collaboration and embracing AI technology in language studies can further enhance the learning experience, enabling students to expand their cultural understanding and thrive in a globalized world. The integration of IT and AI holds

immense promise for the future of language education, empowering students to achieve language proficiency and intercultural competence.

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