

## MODERN PSYCHOLOGICAL AND PEDAGOGICAL TEACHING METHODS

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### DIGITAL TECHNOLOGIES IN LANGUAGE TRAINING FOR AEROSPACE PROFESSIONALS

### ЦИФРОВІ ТЕХНОЛОГІЇ У МОВНІЙ ПІДГОТОВЦІ ФАХІВЦІВ АЕРОСФЕРИ

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**Introduction.** The aerospace industry assumes a pivotal role in modern society, propelling technological advancements, exploring the space, and enabling efficient air travel. As this field continues to evolve rapidly, the demand for highly skilled aerospace professionals escalates exponentially. Language proficiency is of paramount importance for these specialists, as effective communication in a globalized world it is very essential. Consequently, with the rapid advancement of digital technologies, the integration of these tools into language education has become imperative. This paper aims to delve into the assimilation of digital technologies in language training for aerospace professionals, analyzing the challenges and benefits it brings forth.

**Literature Review.** Our investigation is based on some researchers' works who shed light on the effectiveness of digital technologies in language training and offer valuable insights for educators and institutions to optimize language learning methods in the aerospace sector [1, p. 256]. With their contributions and ongoing research, the language proficiency of aerospace professionals will continue to soar, enabling safer and more efficient operations in the global aerospace community [2, p. 115].

**Problem.** Language proficiency among aerospace professionals is critical to ensuring secure and efficient communication across diverse contexts, including flight operations, air traffic control, research collaboration, and international relations. However, traditional language teaching methods may

not fully meet the dynamic requirements of the aerospace industry. Conventional approaches often lack practicality and real-world relevance, rendering them less effective for the specialized language demands of the sector. Additionally, geographical and time constraints may hinder opportunities for face-to-face language training. Hence, there exists a pressing need to adopt innovative teaching methods, leveraging digital technologies, to enhance language learning and cater to the specific needs of the aerospace sector.

**Main Part.** In our research work, we would like to analyze *Online Language Learning Platforms* that offer interactive lessons, adaptive exercises, and virtual classrooms, affording aerospace students flexibility in their learning schedules while receiving tailored instruction to improve their language skills effectively. The theoretical basis for this approach lies in constructivist learning theories, which advocate for active learner engagement in content assimilation and knowledge construction. Furthermore, the integration of multimedia elements aligns with Mayer's Cognitive Theory of Multimedia Learning, positing that combining text, visuals, and audio enhances understanding and retention.

The next digital technologies is *Virtual Reality (VR) and Augmented Reality (AR)* are presented in applications, such as VR and AR. These technologies present immersive language learning experiences, enabling aerospace students to practice scenarios like cockpit communications or interactions with air traffic controllers in realistic environments, thereby augmenting their situational language understanding. The theoretical foundation for this approach resides in situated learning, where learners engage in authentic activities to develop language skills applicable to real-world situations. Moreover, the use of VR and AR aligns with the principles of experiential learning, facilitating reflection on experiences and insights to enhance language performance.

Moreover, there are very useful *Language Learning Apps* for teaching English language, such as Mobile language learning apps that provide on-the-go access to learning materials, allowing aerospace professionals to improve their language proficiency during travel or downtime. The theoretical basis for this approach encompasses the principles of ubiquitous learning, wherein learning occurs seamlessly across different contexts and environments, promoting frequent language practice. Additionally, mobile learning aligns with connectivism, as learners connect with a network of resources and individuals to enhance their language learning experience.

Although we could mention *Machine Learning for Personalized Learning Paths* that is presented by AI-driven language learning platforms and it analyzes students' performance and creates personalized learning paths, addressing their specific language weaknesses and enhancing overall language fluency. The theoretical underpinning for this approach includes the

principles of adaptive learning, wherein technology adjusts to learners' needs and preferences, thereby optimizing the learning process. Moreover, the use of machine learning aligns with behaviorist theories, as learners receive immediate feedback, reinforcing correct language usage and rectifying errors.

The *Online Language Exchange Programs*, such as Digital platforms, facilitate language exchange between aerospace students and native speakers, fostering cultural exchange while improving language skills. The theoretical foundation for this approach lies in social constructivism, wherein learners interact and collaborate with others to co-construct knowledge and language skills. Additionally, the use of online language exchange aligns with sociocultural theories, as learners engage in authentic social interactions, enhancing their language competence through meaningful communication.

Teacher could use on the lessons of English language the following digital technology as *Gamification in Language Learning*. It lies in the aspect of Language learning games and quizzes make the learning process engaging and enjoyable, motivating aerospace students to actively participate and retain knowledge effectively. The theoretical basis for this approach encompasses the principles of flow theory, wherein learners experience a state of optimal engagement and enjoyment during language learning activities. Moreover, gamification aligns with self-determination theory, as learners experience autonomy and competence while progressing through language levels, fostering intrinsic motivation.

The next motivating technology is the tool of *Virtual Language Proficiency Tests*. Digital language assessment tools enable aerospace professionals to conveniently test their language proficiency, providing valuable feedback for improvement. The theoretical underpinning for this approach includes the principles of formative assessment, wherein learners receive ongoing feedback to identify strengths and areas for improvement in their language skills. Additionally, the use of digital assessments aligns with the principles of authenticity and validity, as the tests simulate real-world language use scenarios, ensuring the relevance of the evaluation process.

**Conclusions.** The integration of digital technologies in language training for aerospace professionals is well-founded on various theoretical perspectives in education and language learning. These theoretical frameworks provide a solid basis for understanding the effectiveness of each approach and how it contributes to enhancing language proficiency in the aerospace industry. As higher education institutions continue to explore and implement these innovative methods, it is essential to consider the theoretical underpinnings to optimize language learning strategies and meet the dynamic demands of the aerospace sector. By leveraging the theoretical foundations, educators and institutions can ensure that language training for aerospace professionals remains relevant, efficient, and impactful in today's rapidly evolving technological landscape.

**References:**

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**PECULIARITIES OF PRESCHOOL CHILDREN  
LEISURE ACTIVITIES**

**ОСОБЛИВОСТІ ДОЗВІЛЄВОЇ ДІЯЛЬНОСТІ  
ДІТЕЙ ДОШКІЛЬНОГО ВІКУ**

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На сучасному етапі реформування національної системи освіти актуальності набуває пошук шляхів позитивного спрямування дозвілєвої активності дітей та молоді. Аналізу дозвілєвої діяльності присвячено значну кількість праць вітчизняних та зарубіжних науковців [4]. Зокрема, важливість саморозвитку та самореалізації у сфері дозвілля