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**NON-TRADITIONAL LANGUAGE LEARNING METHODS AND BRAIN ACTIVITY****НЕТРАДИЦИОННЫЕ МЕТОДЫ ИЗУЧЕНИЯ ЯЗЫКА И МОЗГОВАЯ ДЕЯТЕЛЬНОСТЬ****NOAN'ANAVIY TILNI O'RGANISH USULLARI VA MIYA FAOLIYATI****Adamboyeva Nafisa Qodirberganovna** 

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**Abstract**

The study of non-traditional language learning methods has gained significant attention in recent years due to their potential to enhance cognitive engagement and improve language acquisition outcomes. This article examines the role of non-traditional methods, such as immersive learning, gamification, and context-based teaching, in fostering language learning and their impact on brain activity. Findings suggest that non-traditional methods not only improve language retention but also stimulate critical areas of the brain associated with memory, problem-solving, and emotional engagement.

**Аннотация**

Изучение нетрадиционных методов изучения языков привлекло значительное внимание в последние годы в связи с их потенциалом для повышения когнитивной вовлеченности и улучшения результатов усвоения языка. В данной статье рассматривается роль нетрадиционных методов, таких как иммерсивное обучение, геймификация и контекстно-ориентированное обучение, в содействии изучению языка и их влияние на мозговую активность. Полученные данные свидетельствуют о том, что нетрадиционные методы не только улучшают запоминание речи, но и стимулируют критические области мозга, связанные с памятью, решением проблем и эмоциональной вовлеченностью.

**Annotatsiya**

So'nggi yillarda tilni o'rganishning noan'anaviy usullarini o'rganish kognitiv faollikni oshirish va tilni o'rganish natijalarini yaxshilash potentsialiga ega bo'lganligi sababli katta e'tibor qaratildi. Ushbu maqolada tilni o'rganishni rag'batlantirishda immersiv o'rganish, geymifikatsiya va kontekstga asoslangan o'rganish kabi noan'anaviy usullarning rolini va ularning miya faoliyatiga ta'sirini o'rganadi. Topilmalar shuni ko'rsatadiki, noan'anaviy usullar nafaqat nutqni yodlashni yaxshilaydi, balki xotira, muammolarni hal qilish va hissiy aloqalar bilan bog'liq miyaning muhim joylarini rag'batlantiradi.

**Key words:** memory, problem-solving, emotional engagement, gamification, enhanced motivation.

**Ключевые слова:** память, решение проблем, эмоциональная вовлеченность, геймификация, повышенная мотивация.

**Kalit so'zlar:** xotira, muammolarni hal qilish, hissiy aloqa, geymifikatsiya, motivatsiyani kuchaytirish.

**INTRODUCTION**

Traditional language learning methods, characterized by teacher-centered instruction and rote memorization, have long been the standard in education. However, these methods often fail to address the diverse needs of learners and lack the engagement required for deep cognitive processing. Non-traditional language learning methods, on the other hand, emphasize student-centered approaches, active participation, and the integration of technology and real-world contexts. These methods align with modern cognitive and neuroscience findings, which highlight the importance of active engagement and emotional involvement in learning processes[2]. This report aims to explore the effectiveness of non-traditional language learning methods and their impact on brain activity. Specifically, it investigates how these methods stimulate cognitive functions such as memory, attention, and problem-solving, which are critical for language acquisition.

**METHODS**

The analysis is based on a review of recent literature and studies on non-traditional language learning methods and their neurological implications. Key sources include peer-reviewed articles, educational platforms, and research-based instructional techniques. The following methods were examined: **Immersive Learning:** This method involves creating an environment where learners are surrounded by the target language, often through role-playing, virtual reality, or real-life simulations[3]. **Gamification:** The use of games and interactive activities to teach vocabulary, grammar, and conversational skills. This approach leverages the brain's reward system to enhance motivation and retention[4]. **Context-Based Teaching:** Teaching vocabulary and grammar within meaningful contexts, such as storytelling or thematic units, to improve comprehension and application[5]. **Technological Integration:** The use of digital tools, such as language learning apps, virtual communication platforms, and multimedia resources, to provide interactive and personalized learning experiences[6].

## RESULTS

Research indicates that non-traditional methods significantly enhance cognitive functions involved in language learning. Key findings include:

**Memory Retention:** Techniques such as spaced retrieval practice and task repetition improve long-term memory and vocabulary acquisition[7].

**Emotional Engagement:** Immersive and gamified learning environments activate the brain's reward system, increasing motivation and emotional involvement [8].

**Problem-Solving Skills:** Context-based teaching and interactive activities stimulate the prefrontal cortex, enhancing critical thinking and problem-solving abilities[9].

**Non-traditional methods have a profound impact on brain activity:**

**Hippocampus Activation:** Techniques like spaced retrieval practice strengthen the hippocampus, which is essential for memory consolidation[10]. **Prefrontal Cortex Engagement:** Problem-solving tasks and interactive learning stimulate the prefrontal cortex, improving executive functions such as planning and decision-making[11]. **Reward System Activation:** Gamification triggers dopamine release, enhancing motivation and reinforcing learning behaviors[12].

## DISCUSSION

The findings underscore the effectiveness of non-traditional language learning methods in enhancing cognitive and neurological functions. These methods align with modern theories of learning, which emphasize the importance of active engagement, emotional involvement, and real-world application.

### Advantages of Non-Traditional Methods

**Personalized Learning:** Digital tools and gamification allow for tailored learning experiences that cater to individual needs and preferences.

**Increased Retention:** Techniques like spaced retrieval and context-based teaching improve long-term memory and comprehension. **Enhanced Motivation:** The use of games and immersive environments fosters a positive attitude toward learning.

### Challenges and Limitations

Despite their benefits, non-traditional methods face certain challenges:

**Resource Intensity:** Implementing immersive and gamified learning environments requires significant resources and technological infrastructure.

**Teacher Training:** Educators often lack the training and expertise needed to effectively implement these methods[13].

## CONCLUSION

Non-traditional language learning methods represent a significant advancement in education, offering innovative ways to engage learners and enhance cognitive and neurological functions. By integrating these methods into language education, educators can create dynamic and effective learning environments that cater to the needs of modern learners.

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