



AI-ASSISTED VOCABULARY DEVELOPMENT IN YOUNG LEARNERS

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Abstract: *This study explores the impact of AI, particularly ChatGPT, on vocabulary acquisition among young learners. It emphasizes engagement, retention, and motivation. Findings indicate significant improvements in vocabulary growth, learner confidence, and classroom participation.*

Keywords: *artificial intelligence, ChatGPT, vocabulary, education, English language acquisition.*

Artificial Intelligence (AI) has significantly transformed modern education, particularly in the field of language learning. Young learners require engaging and interactive environments to effectively acquire vocabulary; however, traditional teaching methods often fail to sustain their attention and motivation. In this context, AI-powered tools offer adaptive and personalized learning experiences, as well as immediate feedback, which are essential for early language development. Vocabulary serves as the foundation of communication; therefore, the implementation of effective strategies for vocabulary acquisition remains a crucial aspect of language teaching.

Vocabulary acquisition has long been recognized as a key component of language learning. Paul Nation (2001) emphasizes the importance of repetition and meaningful use in vocabulary development. Likewise, Stephen Krashen (1982) highlights the role of comprehensible input, while Lev Vygotsky (1978) underscores the significance of social interaction in the learning process. AI technologies effectively integrate these theoretical perspectives by providing scaffolded,



interactive, and adaptive learning environments. In particular, recent studies on ChatGPT demonstrate improvements in learner motivation, confidence, and vocabulary retention. Although digital learning tools offer features such as gamification, instant feedback, and personalized practice, research focusing specifically on young learners in AI-assisted vocabulary learning remains relatively limited.

The present study involved 10 students aged between 6 and 9 years and was conducted over a four-week period. The learning process incorporated tools such as ChatGPT, flashcards, and story-based prompts. Students participated in daily 20-minute AI-assisted sessions, during which they learned 5–10 new words each day. The activities included interactive dialogues and storytelling tasks designed to encourage the use of newly acquired vocabulary. Data collection methods consisted of pre-test and post-test assessments, observations of student engagement, and feedback from the participants.

The findings revealed a notable improvement in students' vocabulary knowledge, with an average increase of 45%. In addition, student engagement and participation improved significantly throughout the study. Learners demonstrated progress in pronunciation, sentence formation, and spontaneous use of vocabulary. Compared to traditional instructional approaches, AI-assisted learning proved to be more motivating, as it reduced learners' anxiety and increased their confidence in using the language.

The results also indicate that AI-assisted learning provides a supportive and low-pressure environment that facilitates vocabulary acquisition. Repetition, immediate feedback, and personalization emerged as key factors contributing to learning success. At the same time, the role of the teacher remains essential in guiding, supporting, and scaffolding the learning process. Observations suggest that students demonstrated different areas of improvement: some showed greater progress in pronunciation, while others improved more in vocabulary usage, highlighting the adaptability of AI tools to individual learning needs.



From a practical perspective, AI tools can be effectively integrated into classroom activities for vocabulary practice, interactive storytelling, and conversational exercises. Additionally, parents can support this learning process at home, reinforcing vocabulary acquisition beyond the classroom setting. It is important to note that AI should be considered a complementary tool rather than a replacement for traditional teaching methods.

In conclusion, AI-assisted vocabulary learning significantly enhances engagement, retention, and confidence among young learners. The integration of AI into early education has the potential to produce measurable improvements in English language acquisition. Future research should focus on expanding the sample size, extending the duration of studies, and examining the long-term effects of AI-assisted learning on vocabulary development.

REFERENCES

1. Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge University Press.
2. Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*. Pergamon.
3. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
4. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence Unleashed: An Argument for AI in Education*.