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Artificial Intelligence in EFL Reading Instruction: A Review of the Gizmo Application for High School Learners

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Abstract
The integration of artificial intelligence (AI) into English language education has transformed the way students engage with reading activities. Among emerging AI-assisted learning applications, Gizmo has gained increasing attention for its ability to convert learning materials into interactive quizzes, flashcards, and personalized practice activities. This review examines the potential of the Gizmo application in supporting English as a Foreign Language (EFL) reading instruction for high school learners. Drawing on literature related to reading comprehension, AI-assisted language learning, and educational technology, the review discusses how Gizmo may contribute to vocabulary development, reading comprehension improvement, learner engagement, and self-regulated learning. The review also highlights several challenges associated with AI-assisted reading tools, including learner dependence on technology, varying levels of digital literacy, and limitations in developing higher-order reading skills. The findings suggest that Gizmo offers considerable pedagogical value when integrated into reading instruction. However, its effectiveness depends on appropriate teacher guidance and meaningful classroom implementation. The review concludes that AI-assisted applications such as Gizmo should be viewed as supportive learning tools rather than replacements for teachers in EFL classrooms.

Keywords: *artificial intelligence, EFL reading, Gizmo, reading comprehension, educational technology*

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I. Introduction

Reading comprehension is widely recognized as a fundamental skill in English language learning. Through reading, learners acquire vocabulary, grammatical knowledge, and critical thinking abilities that support overall language development. However, many EFL learners continue to experience difficulties understanding English texts due to limited vocabulary, inadequate reading strategies, and low motivation.

Recent advances in artificial intelligence (AI) have introduced new opportunities for language learning. AI-assisted applications can provide personalized learning experiences, immediate feedback, and interactive learning environments that may increase learner engagement. Among these applications, Gizmo has emerged as a promising educational tool that transforms learning materials into AI-generated quizzes, flashcards, and comprehension activities.

Given the growing interest in AI-assisted language learning, this review explores the educational potential of the Gizmo application in supporting reading instruction for high school EFL learners.

II. Reading Comprehension and AI-Assisted Learning

Reading comprehension involves the interaction of linguistic knowledge, cognitive processes, and background understanding (Grabe, 2009). Successful reading requires learners to identify main ideas, infer meaning, recognize supporting details, and connect information across texts. However, many secondary-school learners struggle with these skills, particularly in EFL contexts.

The integration of AI into education has provided new approaches to addressing these challenges. According to Holmes et al. (2019), AI technologies can support personalized learning by adapting content to learners' needs and providing immediate feedback. Similarly, Zawacki-Richter et al. (2019) argue that AI-assisted educational tools can increase learner engagement and promote self-directed learning. These characteristics make AI particularly relevant for reading instruction, where repeated practice and individualized support are essential.

III. Theoretical & Conceptual framework

Within the lens of a broad theoretical framework, this paper aims to evaluate the potential of the AI-enhanced Gizmo app to improve the English reading comprehension of learners. The framework identifies five major underlying theories: CALL (Computer-Assisted Language Learning), Constructivist Learning, Schema Theory, Vygotsky's Sociocultural Theory, and Adaptive Learning Theory. Each of these theoretical perspectives is very useful in this context for understanding how, through technological tools, communication, and individualized learning, a transformation in reading development at the EFL level can be achieved. Figure 1 below depicts Conceptual framework: Gizmo App and reading comprehension development.

Figure 1. Conceptual Framework: Gizmo App and Reading Comprehension Development

IV. Educational Benefits of the Gizmo Application

One of the primary strengths of Gizmo lies in its ability to support vocabulary learning. By converting reading materials into flashcards and quizzes, the application provides repeated exposure to key vocabulary items. Repeated encounters with vocabulary have been widely recognized as an important factor in the development.

Gizmo may also contribute to improving reading comprehension through interactive practice activities. Instead of passively reading texts, learners actively engage with comprehension questions and immediate feedback. Such interaction may help students identify important information, monitor their understanding, and reinforce learning.

Another important benefit relates to learner engagement. Traditional reading activities are sometimes perceived as monotonous by secondary-school learners. The gamified and interactive nature of Gizmo may increase students' interest and motivation, encouraging more frequent engagement with reading materials.

Finally, the application promotes self-regulated learning by allowing students to practice independently and review content at their own pace. This flexibility can be particularly beneficial for high school learners with different proficiency levels and learning preferences.

V. Challenges and Limitations

Despite its potential benefits, several limitations should be considered. First, the effectiveness of Gizmo depends largely on students' motivation and self-discipline. Learners who engage regularly with the application are more likely to benefit than those who use it infrequently.

Second, AI-assisted applications may be more effective in supporting vocabulary acquisition and basic comprehension than higher-order reading skills such as inference, evaluation, and critical analysis. These skills often require teacher guidance and classroom discussion.

Third, access to technology and digital literacy may influence students' learning experiences. Technical issues or limited familiarity with digital tools can reduce the effectiveness of AI-assisted learning.

Therefore, while Gizmo offers valuable support for reading instruction, it should complement rather than replace teacher-guided learning.

VI. Conclusion

The review suggests that the Gizmo application has considerable potential for supporting EFL reading instruction among high school learners. Through AI-generated practice activities, immediate feedback, and flexible learning opportunities, the application may enhance vocabulary development, reading comprehension, learner engagement, and self-regulated learning. However, challenges related to learner motivation, digital literacy, and higher-order reading skills remain. Consequently, Gizmo should be regarded as a supportive educational tool that works most effectively when integrated with sound pedagogical practices and teacher

guidance. Future research should continue exploring the long-term effects of AI-assisted reading applications across diverse educational contexts.

References

[1]. Anderson, N. J. (2003). Scrolling, clicking, and reading English: Online reading strategies in a second/foreign language. *The Reading Matrix, 3*(3), 1–33.
[2]. Chapelle, C. A. (2003). *English language learning and technology*. John Benjamins Publishing Company.
[3]. Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge University Press.
[4]. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.
[5]. Hughes, A. (2003). *Testing for language teachers* (2nd ed.). Cambridge University Press.
[6]. Klingner, J. K., Vaughn, S., & Boardman, A. (2007). *Teaching reading comprehension to students with learning difficulties*. Guilford Press.
[7]. Levy, M. (1997). *Computer-assisted language learning: Context and conceptualization*. Oxford University Press.
[8]. Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). Conceptualizing AI literacy: An exploratory review. *Computers and Education: Artificial Intelligence, 2*, 100041. https://doi.org/10.1016/j.caeai.2021.100041
[9]. Nunan, D. (1992). *Research methods in language learning*. Cambridge University Press.
[10]. Richards, J. C. (2015). *Key issues in language teaching*. Cambridge University Press.
[11]. Snow, C. E. (2002). *Reading for understanding: Toward a research and development program in reading comprehension*. RAND Corporation.
[12]. UNESCO. (2023). *Guidance for generative AI in education and research*. UNESCO.
[13]. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence in higher education: Where are the educators? *International Journal of Educational Technology in Higher Education, 16*(1), 39. https://doi.org/10.1186/s41239-019-0171-0
[14]. Zhang, K., & Aslan, A. B. (2021). AI technologies for education: Recent research and future directions. *Computers and Education: Artificial Intelligence, 2*, 100025. https://doi.org/10.1016/j.caeai.2021.100025
[15]. Zhao, Y. (2021). Build back better: Avoid the learning loss trap. *Prospects, 51*(4), 557–561. https://doi.org/10.1007/s11125-021-09544-y
[16]. Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2