

## **Enhancing esl learners reading comprehension and motivation via ai-generated personalised reading texts**

### **ABSTRACT**

This study identifies the effect of AI-generated personalised reading texts on ESL learners' reading comprehension and motivation at the secondary school level in Sabah, Malaysia. Drawing on the research of Jendia and Ismail (2023), the current study extends the exploration of AI's potential in tailoring reading materials to cater to individual learner needs. Conducted with 20 students from SMK Desa Kencana, Lahad Datu, the study employed a mixed-methods approach that incorporates both quantitative (pre-assessment and post-assessment scores) and qualitative (open-ended questions) data. The findings reveal significant improvements in reading comprehension, specifically among low and intermediate proficiency groups. Advanced learners, however, failed to show maximal gains from the intervention which suggests the need for materials challenging materials yet suitable for higher proficiency levels. The intervention's effectiveness is due to the personalised and engaging nature of the AI-generated texts, which enhanced learners' motivation and engagement. Qualitative feedback obtained from the students also indicates the relevance of the personalised materials in the classroom. Despite the positive outcomes, limitations such as small sample size, external factors, and convenience sampling that may affect the generalizability of data are recognized. The study concludes with practical and theoretical implications, recommending integrating AI-based personalised materials in ESL education to support differentiated instruction and meet diverse learning needs. Future research should consider more extensive yet diverse samples and control for external variables to validate and broaden these findings.