

Usefulness Of Ai-Based Reading Platforms In Increasing Reading Ability

Irgasheva Madina Irgashevna

Uzbek State University Of World Languages English Faculty-1, The Department Of The English Language Applied Sciences, Uzbekistan

Received: 09 January 2025; Accepted: 15 February 2025; Published: 13 March 2025

Abstract: Its primary scope was to evaluate the impact of micro learning on students in higher education. The sample was composed of first year BA students and a post-test control group design was applied to determine the effectiveness of a micro learning module. The findings showed that micro learning had a positive correlation with learning performance outcomes as well as with the participants' perceptions about the module. Additionally, the participants from the micro learning group performed better than those in the control group by a significant margin. It can be concluded that engagement and learning performance can be improved by micro learning. The study does have some constraints, and additional research will be undertaken in order to fully understand how best to design and implement micro learning modules. These findings endorse the notion that micro learning can serve as an effective instructional design tool in higher education.

Keywords: Micro learning, instructional design, instructional methods, cognitive load theory, learning effectiveness.

Introduction: Perusing and comprehending content may be a basic expertise central to scholastic victory and deep rooted learning (National Perusing Board, 2000), counting online learning, for which extra advanced abilities are too required. Be that as it may, understudies battle with comprehension and conventional approaches to educating perusing may not continuously compelling for all understudies. Concurring to the National Evaluation of Instructive Progress (NAEP), as it were 35% of fourth-grade understudies within the Joined together States performed at or over the capable level in perusing in 2019 (NAEP, 2019). This accomplishment crevice in perusing capability is indeed more articulated among understudies from lowincome families and those from minority foundations (Reardon et al., 2012; National Center for Instruction Measurements, 2019). Understudies who battle with perusing comprehension confront various challenges, counting constrained get to to data, diminished scholarly openings, and lower lifetime gaining potential (Kirsch et al., 2011). In this way, it is pivotal to recognize down to earth arrangements that can offer assistance understudies create and upgrade their perusing comprehension abilities. Later investigate

underlined the significance of customized and versatile learning methodologies in progressing perusing comprehension aptitudes (Fisher & Frey, 2020), as well as the part of innovation in supporting assorted learning needs (EdTech, 2021).

In later a long time, progresses in fake insights (AI) and normal dialect handling (NLP) have driven to the improvement of customized learning stages that can adjust to the wants and capacities of each understudy. These stages utilize machine learning calculations to dissect understudy execution information and give customized suggestions for perusing materials and comprehension works out (Xie et al., 2018). An case of a customized learning stage for perusing is Lexia Core5 Perusing. This stage evaluates each student's perusing capacities and tailors its exercises to their needs. For illustration, in the event that a understudy battles with phonics, Lexia Core5 gives particular, intuitively works out to move forward this expertise. The stage ceaselessly adjusts to students' advance, advertising more complex assignments as their capacities move forward. Teachers can screen this advance through real-time information, permitting for focused on, inclass back. This approach guarantees customized and viable perusing expertise improvement for each

understudy.

METHODS

This consider examined the impacts of an Al-based customized perusing stage on perusing comprehension among senior tall school understudies in Indonesia. Utilizing Cluster Arbitrary examining, 85 understudies with different foundations were partitioned into an exploratory gather, which locked in with the AI stage, and a control bunch, which followed to their standard perusing educational programs. The consider pointed at assessing the intervention's adequacy without disturbing the school's instructive hones. Incorporation criteria were senior tall school enrollment and assent, barring those with perusing incapacities. Conducted over eight weeks in a common setting, the think about included pre-, and post-assessments utilizing institutionalized tests. Information examination used clear and inferential insights to evaluate affect on comprehension, inspiration and engagement, following to APA moral rules and guaranteeing member privacy.

This study's AI-based personalised reading platform was designed to provide each student with a highly personalised reading experience. To achieve this, the platform incorporated advanced algorithms that analysed each student's reading level, interests, and

learning style to provide them with personalised recommendations for reading materials. The platform used a variety of metrics, such as word frequency, sentence length and reading speed, to determine the most appropriate reading level for each student.

RESULTS

In this section, we discuss the key findings of our study and relate them to previous research in the field. We also address the limitations of the study and provide suggestions for future research. Finally, we discuss the practical implications of our findings for educators and policymakers.

Table 1 provides a summary of case processing for an experiment comparing the effectiveness of an AI-based personalised reading platform to enhance reading comprehension between two groups: an experimental group using the AI-based reading platform and a control group. The table shows that there were no missing cases for either group, and that the total number of cases was 43 for the experimental group and 42 for the control group. The percentages indicate that all cases were valid and included in the analysis. This information is important for ensuring the reliability and validity of the experiment's results.

Cases Valid Missing Total Percent N Percent N Percent Group Percentage 100.0% 0 0.0% 100.0% Experimental 43 43 Control 42 100.0% 0 0.0% 42 100.0%

Table 1: Case Processing Summary

Table 2 provides descriptive statistics for two groups: the experimental group, which used an Al-based personalised reading platform, and the control group, which did not use the platform. The focus of the study was on the effectiveness of the platform in enhancing reading comprehension. The table shows the mean percentage score of 41.98 for the experimental group, which is the average score for reading comprehension. The 95% confidence interval for the mean ranges from

37.16 to 46.80, which means that the population's true mean is likely to fall within this range with 95% confidence. The table also provides information on other measures of central tendency, such as the 5% trimmed mean, and the median and measures of variability, such as the variance, standard deviation, minimum and maximum scores, range and interquartile range. The skewness and kurtosis values show the distribution of the scores.

Table 2: Descriptive Statistics

Group	Mean	Standard Deviation	Median	Range	Lower Bound 95% CI	Upper Bound 95% CI
Experimental	41.9828	15.66855	39.1200	63.50	37.1607	46.8049
Control	22.8590	4.48168	22.2350	20.51	21.4625	24.2556

For the control group, Table 2 shows similar descriptive statistics as for the experimental group. The mean

percentage score for reading comprehension for this group was 22.8590, which is much lower than that of the experimental group. The 95% confidence interval

American Journal Of Philological Sciences (ISSN – 2771-2273)

for the mean ranged from 21.46 to 24.25. The table also provides information on other measures of central tendency and variability. The skewness and kurtosis values show the distribution of the scores.

DISCUSSION

The effectiveness of personalised reading platforms has been widely studied in recent years. Studies have shown that personalised learning, including personalised reading platforms, can improve student learning outcomes (Cavanaugh et al., 2019). Moreover, Al-based personalised reading platforms are particularly effective, as they can provide tailored learning experiences to individual students based on their reading level and interests (VanLehn et al., 2019). This personalised approach to learning has been shown to be more effective than traditional classroom-based instruction (VanLehn et al., 2019).

Additionally, the use of AI in education has been shown to have several benefits. AI can analyse vast amounts of data to provide insights into student performance and identify areas where students need additional support (Blikstein, 2018). Moreover, AI-based learning platforms can provide real-time feedback to students, which has been shown to be effective in enhancing learning outcomes (D'Mello & Graesser, 2012).

The results from this study provide support for the effectiveness of an Al-based personalised reading platform in enhancing reading comprehension. This finding is consistent with previous research on the benefits of personalised learning and the use of Al in education. The use of Al-based learning platforms can provide personalised learning experiences to students, identify areas where students need additional support, and provide real-time feedback, leading to improved learning outcomes.

It is important to note that while the results of the ttest suggest that the Al-based personalised reading platform was effective in enhancing reading comprehension, there may be other factors that contributed to the difference in mean scores between the experimental and control groups. Future research could investigate these factors and their potential impact on the effectiveness of the Al-based platform. Overall, this study's results support the effectiveness of Al-based personalised learning platforms in enhancing reading comprehension. The use of Al in education has the potential to provide personalised learning experiences, identify areas where students need additional support and provide real-time feedback, leading to improved learning outcomes.

CONCLUSIONS

In conclusion, this study proves that Al-based

personalised reading platforms can effectively improve reading comprehension among senior high school students. The results indicate that students who utilised the platform outperformed those who did not, highlighting the potential of technology revolutionise teaching reading. Given the prevalence of reading difficulties among students, the findings of this study have important implications for educators and administrators seeking to enhance students' reading skills. The study's results suggest that incorporating Albased personalised reading platforms into teaching strategies could be a promising approach to improving reading skills. These platforms can provide students with individualised reading materials and feedback, helping them develop their comprehension skills in a way tailored to their needs. As such, educators and administrators should consider exploring the use of these platforms in their teaching practices.

Overall, this study highlights the importance of leveraging technology to support student learning and underscores the potential of Al-based platforms in enhancing reading comprehension. As technology continues to evolve, educators and administrators should remain vigilant in exploring new approaches to teaching and learning, and consider the potential benefits of incorporating Al-based platforms into their teaching strategies.

REFERENCES

Akiba, M., Yamamoto, Y., & Fujimoto, A. (2020). An Albased reading comprehension support system for middle school students. Journal of Educational Technology Development and Exchange, 13(2), 87-98. https://doi.org/10.11648/j.etde.20200102.12

Blikstein, P. (2018). Artificial intelligence and the future of education. Science Robotics, 3(21), eaat9590. https://doi.org/10.1126/scirobotics.aat9590

Cavanaugh, C., Gillan, K.J., Kromrey, J., Hess, M., & Blomeyer, R. (2019). Personalised learning: A practical guide for engaging students with technology. Corwin Press.

D'Mello, S., & Graesser, A. (2012). Dynamics of affective states during complex learning. Learning and Instruction, 22(2), 145-157. https://doi.org/10.1016/j.learninstruc.2011.08.002

EdTech. (2021). Integrating technology in the classroom: Trends and insights. EdTech Magazine.

Fisher, D., & Frey, N. (2020). The distance learning playbook, grades K-12: Teaching for engagement and impact in any setting. Corwin.

Hernandez, D.J. (2011). Double jeopardy: How third-grade reading skills and poverty influence high school graduation. The Annie E. Casey Foundation.

American Journal Of Philological Sciences (ISSN - 2771-2273)

Iwata, Y., Yokoyama, T., & Umemura, Y. (2020). An Albased writing feedback system for improving reading comprehension skills. Educational Technology Research and Development, 68(4), 1739-1759. https://doi.org/10.1007/s11423-020-09774-7

Khan, A., & Mutawa, M. (2021). Enhancing reading comprehension skills of Arab EFL learners using an Albased personalised reading platform. International Journal of Emerging Technologies in Learning, 16(6), 119-136. https://doi.org/10.3991/ijet.v16i06.12695

Kirsch, I., Jungeblut, A., Jenkins, L., & Kolstad, A. (1993). Adult literacy in America: A first look at the results of the National Adult Literacy Survey. National Center for Education Statistics.

Liu, Y., Zou, W., & Wang, Y. (2020). An Al-based personalised reading platform for Chinese primary school students. Journal of Educational Technology Development and Exchange, 13(1), 1-16. https://doi.org/10.11648/j.etde.20200101.11