

**THE EFFECTIVENESS OF USING THE MOODLE PLATFORM IN  
DEVELOPING STUDENTS' SPEAKING SKILLS**

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**Abstract**

The growing integration of digital tools in language instruction has created new opportunities for improving speaking competence among EFL learners. This study aims to explore the effectiveness of Moodle, a widely used Learning Management System (LMS), in enhancing students' speaking skills in an English course designed for non-English majors. The participants were 30 students from the Accounting Study Program at University of Aisyah Pringsewu, enrolled during the 2024/2025 academic year. A one-group pre-test and post-test design was employed to assess changes in performance following an eight-week Moodle-based intervention. Speaking tasks were delivered through Moodle features, including voice recordings, discussion forums, and peer feedback. Assessments were conducted using standard TOEFL/IELTS-based speaking rubrics. Descriptive statistical analysis revealed a significant improvement in speaking scores, with the average rising from 57.63 (pre-test) to 79.73 (post-test). The normality of the data was confirmed using the Shapiro-Wilk test, and a paired samples t-test yielded a statistically significant difference ( $p < 0.05$ ), supporting the effectiveness of the intervention. The structured, asynchronous learning environment provided by Moodle enabled students to practice consistently, build confidence, and reduce performance anxiety. Furthermore, the integration of interactive and reflective speaking activities promoted greater learner autonomy. These findings suggest that Moodle can be a valuable platform for fostering speaking development in higher education, particularly for students outside language-related majors. It also highlights the potential of LMS-based instruction to support communicative competence in EFL contexts.

**Keywords :** Moodle, speaking skills, digital learning, EFL students

## **INTRODUCTION**

In today's higher education landscape, the adoption of digital tools particularly Learning Management Systems (LMS) has become increasingly significant for fostering language proficiency. Among the four core skills, speaking remains one of the most neglected in conventional classrooms due to constraints like limited time, large student numbers, and insufficient feedback mechanisms (Negoescu et al., 2021). The development of oral fluency demands regular practice, constructive feedback, and low-anxiety environments conditions that are often challenging to achieve in face-to-face settings. As Chilcutt and Brooks (n.d.) assert, repeated speaking practice plays a pivotal role in enhancing clarity and delivery confidence. However, language-related anxiety can significantly hinder learners' communicative effectiveness, often resulting in diminished motivation and reduced classroom engagement (Altun, 2023). Research has shown that structured strategies, including guided classroom interactions, can help lower speaking-related anxiety (Elahemer & Said, 2022; Aliyu et al., 2019).

This persistent challenge has encouraged educators to explore technological alternatives such as Moodle, a web-based LMS that facilitates the design and management of online courses, including those focused on oral language development. Through its features such as voice and video submissions, interactive forums, quizzes, and peer assessments Moodle provides learners with a flexible and controlled space to practice speaking at their own pace. A study by Negoescu et al. (2021) highlighted that using Moodle helped students overcome performance-related anxiety while promoting fluency and precision through repeated exposure and low-stress practice. The platform's user-friendly interface and collaborative tools support a more engaging and personalized learning process (Rodriguez, 2019), while its adaptability to different learning styles allows for differentiated instruction and assessment (Shandra, 2024).

One of Moodle's most valuable features is its support for formative assessment through peer feedback. Sulhah and Oktaviana (2024) demonstrated that involving students in peer evaluation led to a notable increase in average speaking scores, from 60 to 75, suggesting that structured peer review can significantly enhance oral performance. Moreover, integrating multimedia content particularly video-based speaking assignments has proven effective in improving learners' language output and confidence, as shown by Menggo, Basir, and Halum (2022) in their study with EFL students in a university context.

Beyond these specific outcomes, Moodle fosters learner autonomy and supports individualized learning trajectories hallmarks of modern pedagogy. According to Soliman (2018), the use of LMS platforms empowers students to regulate their own learning, especially in speaking tasks that require continuous self-monitoring and reflection. When used in blended learning formats, Moodle can enrich in-person instruction by extending language practice beyond the physical classroom. Both Wu et al. (2012) and Soliman (2018) emphasized the benefits of integrating LMS tools to create more interactive, student-centered learning environments tailored to speaking development.

Despite these promising findings, existing literature often addresses general EFL settings or broad blended learning models, while limited research has specifically investigated the effectiveness of Moodle in intermediate-level speaking courses. Therefore, this study titled *"The Effectiveness of Using the Moodle Platform in Developing Students' Speaking Skills in the Intermediate Speaking Course"* seeks to fill this gap by examining how Moodle-based strategies influence oral proficiency, learner motivation, and autonomy in a focused university-level context. The outcomes of this research aim to contribute to practical, evidence-based approaches for speaking instruction using LMS platforms in Indonesian higher education.

In Indonesia, the use of LMS tools like Moodle is still relatively underdeveloped, especially in courses that prioritize speaking. Traditional teaching practices continue to dominate, limiting opportunities for individual oral practice due to institutional and logistical barriers. However, as digital literacy among students increases, there is a growing opportunity to leverage platforms such as Moodle not only as repositories for instructional materials but also as dynamic spaces for interactive language learning. Exploring how Moodle can enhance speaking instruction may provide valuable insights for improving student engagement, spoken language output, and learner independence particularly for non-English-major students with restricted exposure to authentic communication outside academic settings. Supporting this, Ningias and Indriani (2023) observed that the use of LMS in online language learning positively impacted students' self-confidence in speaking, reinforcing the idea that Moodle can cultivate both motivation and oral participation.

## **RESEARCH METHODOLOGY**

This study employed a quantitative research approach using a one-group pre-test and post-test design to examine the

effectiveness of Moodle as a digital platform in enhancing students' speaking skills in the Intermediate Speaking course. This design was selected for its ability to measure measurable changes over time by comparing student performance before and after a specific intervention—in this case, the structured integration of Moodle into classroom instruction. It enables the researcher to identify not only statistical differences but also learning gains that may result from consistent engagement with the platform.

The participants of this study were 30 undergraduate students from the Accounting Study Program at University of Aisyah Pringsewu, all of whom were enrolled in an English course during the even semester of the 2024/2025 academic year. A purposive sampling method was utilized to select individuals who regularly participated in speaking classes and had sufficient access to the Moodle platform, ensuring that all subjects were able to fully engage with the digital learning environment during the intervention period.

Data collection was conducted using a speaking proficiency test, developed in alignment with international standards such as the TOEFL and IELTS speaking assessment rubrics. The instrument assessed students' performance across five essential dimensions: fluency, pronunciation, grammar accuracy, vocabulary usage, and coherence. The test was administered twice before the intervention (pre-test) and after the eight-week treatment (post-test) to determine the degree of improvement. Two instructors independently scored the students' responses to improve rating reliability and minimize potential bias in evaluation.

During the intervention phase, Moodle functioned as the central instructional tool for all speaking-related activities. Students participated in a range of tasks, including voice recordings, written reflections, asynchronous forum discussions, structured oral assignments, and both instructor-led and peer feedback sessions. These activities were systematically designed and implemented over a period of eight weeks, with classes held twice per week, allowing adequate exposure and repetition to build confidence and competence in speaking. The collected data were analyzed using SPSS version 26, applying a Paired Samples T-Test to determine whether there was a statistically significant difference between pre-

and post-test scores. The significance level was set at  $\alpha = 0.05$ . This statistical test was chosen due to its suitability for measuring differences in paired observations, ensuring the results reflected genuine learning improvements attributable to the Moodle-based instruction.

By adopting this methodological structure, the present study aims to provide empirical evidence on the pedagogical value of Moodle in fostering speaking proficiency, especially among students outside language-focused disciplines. The findings are intended to support broader implementation of LMS-based strategies within English language teaching in Indonesian higher education and to inform future digital curriculum development efforts in similar contexts.

## **FINDING AND DISCUSSIONS**

### **FINDINGS**

In order to evaluate the pedagogical impact of the Moodle platform on students' speaking performance, this section presents the statistical outcomes derived from the analysis of pre-test and post-test data. The objective of this analysis is to determine whether the integration of Moodle in instructional delivery produced a significant improvement in learners' oral proficiency. The results are structured sequentially, beginning with descriptive statistics to outline overall trends, followed by normality testing to validate the assumptions for parametric analysis. Subsequently, a paired samples t-test is employed to assess the statistical significance of the intervention, and the discussion is enriched by drawing comparisons with findings from relevant prior studies in the field of technology-enhanced language learning.

Table 1. Pre-Test and Post-Test Results.

Code Number Students	Pre-Test Score	Post-Test Score
S1	58	74
S2	42	69
S3	61	82

S4	60	80
S5	46	73
S6	66	75
S7	73	90
S8	42	64
S9	63	87
S10	48	76
S11	57	86
S12	60	76
S13	58	74
S14	68	80
S15	55	83
S16	69	82
S17	48	72
S18	66	85
S19	63	78
S20	54	79
S21	46	73
S22	62	85
S23	68	89
S24	40	78
S25	53	91
S26	68	87
S27	65	82
S28	55	76
S29	52	79
S30	63	87

This section presents the analysis of the pre-test and post-test scores aimed at evaluating the effectiveness of Moodle in improving students' speaking skills. The results include descriptive statistics, normality testing, a paired samples t-test, and gain score analysis, followed by a discussion in relation to previous research.

The comparison of pre-test and post-test scores is shown in Table 2. A clear increase in the mean score is observed after the Moodle-based intervention.

Table 2. Descriptive Statistics of Pre-Test and Post-Test Scores

Measure	Pre-Test	Post-Test
N	30	30
Mean	57.63	79.73
Standard Deviation	8.99	6.56
Minimum	40	64
Maximum	73	91

The mean post-test score rose by over 22 points compared to the pre-test. The reduced standard deviation indicates greater score consistency after the treatment, suggesting more uniform learning outcomes among students. Normality testing was conducted using the Shapiro-Wilk method to determine the suitability of parametric testing. The results are presented in Table 3.

Table 3. Shapiro-Wilk Normality Test

Dataset	W Statistic	p-value	Interpretation
Pre-Test	0.957	0.263	Normally distributed
Post-Test	0.978	0.780	Normally distributed

Both datasets met the assumption of normality ( $p > 0.05$ ), validating the use of the paired samples t-test in the next stage of analysis.

To assess whether the observed improvement was statistically significant, a paired samples t-test was conducted. The results are presented in Table 4.

Table 4. Paired Samples T-Test

Comparison	t-value	df	p-value
Post-Test vs Pre-Test	17.83	29	0.000

The analysis yielded a highly significant result ( $p < 0.05$ ), indicating that the increase in speaking scores following the Moodle intervention was not due to chance.

The findings confirm that the use of Moodle significantly enhanced students' speaking performance. The asynchronous nature of Moodle activities, such as recorded speaking tasks, online discussions, and structured peer feedback, allowed students to practice in a less pressurized environment. This not only supported linguistic development but also helped reduce anxiety, which is often a barrier in speaking tasks. These results support the conclusions of Sulhah and Oktaviana (2024), who reported improved speaking outcomes through Moodle-mediated peer assessment. Similarly, Menggo et al. (2022) observed that video-based speaking activities in LMS environments fostered better fluency and learner confidence. The findings are also consistent with Negoescu et al. (2021), who noted that Moodle encourages active speaking participation by reducing students' fear of making mistakes. Furthermore, the positive results in this study underscore the importance of integrating digital platforms into EFL speaking instruction, particularly in non-English-major contexts, where speaking practice is often limited in traditional classroom settings.

## CONCLUSION AND SUGGESTION

### CONCLUSION

The use of Moodle as a learning platform was proven to be effective in enhancing the speaking abilities of students in the English class of the Accounting Study Program at University of Aisyah Pringsewu. Moodle offers various learning features that allow students to engage in speaking practice, study independently, and receive both peer and instructor feedback. This flexible and interactive platform helps increase students' confidence and motivation in using English orally, which in turn supports the overall improvement of their speaking skills.

Throughout the learning process, students benefited from repeated practice opportunities and a supportive learning environment that allowed them to develop at their own pace. The

integration of speaking-focused activities such as audio submissions, discussion forums, and peer evaluations provided a well-rounded approach to oral skill development. In addition, the structured digital setting helped reduce students' anxiety about speaking, enabling them to perform more naturally and fluently. Based on the results of this study, Moodle can be considered a practical and pedagogically effective tool for developing speaking competence in higher education, especially among non-English major learners.

## **SUGGESTION**

In light of the findings, it is recommended that educators in higher education, particularly those teaching English to non-language majors, consider integrating Moodle into their speaking instruction. The platform's flexible and student-centered features offer valuable opportunities for learners to engage in consistent oral practice, receive constructive feedback, and develop speaking confidence in a supportive digital environment.

Future implementations should explore the integration of more diverse and task-based speaking activities, such as scenario-based recordings, interactive speaking journals, or collaborative voice projects, to further enhance student engagement and authenticity of language use. It is also suggested that instructors provide clear guidelines and timely feedback to maximize the platform's pedagogical potential.

For further research, it is advisable to conduct comparative studies involving control groups or to apply a mixed-methods approach in order to gain a more comprehensive understanding of how Moodle influences both speaking proficiency and learner attitudes. Expanding the study to other programs or universities may also help validate and generalize the findings across different educational contexts.

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