

MOODLE INTEGRATION IN ENGLISH VOCABULARY LEARNING: UNIVERSITY STUDENTS' PERCEPTIONS

INTEGRACIÓN DE MOODLE EN EL APRENDIZAJE DEL VOCABULARIO EN INGLÉS: PERCEPCIONES DE ESTUDIANTES UNIVERSITARIOS

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Abstract

English vocabulary development represented a relevant challenge in university education, particularly given the need to integrate digital resources that promote more interactive, flexible, and autonomous learning processes. The study aimed to analyze university students' perceptions of Moodle integration as a support tool for English vocabulary learning. A quantitative, non-experimental, cross-sectional, and descriptive study



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was conducted. Participants were 31 second-semester students enrolled in the National and Foreign Language Pedagogy program at Universidad Estatal del Sur de Manabí, selected through non-probability convenience sampling. Data were collected through a structured 10-item questionnaire using a five-point Likert-type scale. The results showed a predominantly favorable evaluation of Moodle, particularly for multimedia support (84%), peer collaboration (83%), access to materials (77%), and interactivity (77%). It is concluded that Moodle was perceived as a relevant environment for complementing vocabulary learning; however, its contribution depends on the pedagogical design of activities and does not, by itself, demonstrate objective improvement in lexical performance.

Keywords: educational technology; English language teaching; Moodle; student perception; vocabulary learning.

Resumen

El desarrollo del vocabulario en inglés constituyó un desafío relevante en la formación universitaria, especialmente ante la necesidad de integrar recursos digitales que favorecieran procesos de aprendizaje más interactivos, flexibles y autónomos. El estudio tuvo como objetivo analizar las percepciones de estudiantes universitarios sobre la integración de Moodle como apoyo al aprendizaje del vocabulario en inglés. Se desarrolló una investigación cuantitativa, no experimental, transversal y descriptiva. Participaron 31 estudiantes de segundo semestre de la carrera Pedagogía de los Idiomas Nacionales y Extranjeros de la Universidad Estatal del Sur de Manabí, seleccionados mediante muestreo no probabilístico por conveniencia. La información se recopiló mediante un cuestionario estructurado de 10 ítems con escala tipo Likert de cinco puntos. Los resultados evidenciaron una valoración predominantemente favorable de Moodle, especialmente en el apoyo multimedia (84%), la colaboración entre pares (83%), el acceso a materiales (77%) y la interactividad (77%). Se concluye que Moodle fue percibido como un entorno pertinente para complementar el aprendizaje del vocabulario, aunque su contribución depende del diseño pedagógico de las actividades y no demuestra, por sí sola, mejoras objetivas en el desempeño léxico.

Keywords: aprendizaje del vocabulario; enseñanza del inglés; Moodle; percepción estudiantil; tecnología educativa.

Fecha de recibido: 02/05/2026

Fecha de aceptado: 01/07/2026

Fecha de publicado: 12/07/2026

Introduction

Vocabulary knowledge is a central component of English as a Foreign Language (EFL) learning because it supports comprehension and production across listening, speaking, reading, and writing. Vocabulary development, however, requires more than occasional exposure to isolated words. Learners need repeated encounters, meaningful practice, accessible resources, and opportunities to use lexical items in varied contexts. In higher education, these requirements have increased interest in digital environments capable of



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extending language learning beyond scheduled classroom time and supporting flexible and autonomous forms of study.

The expansion of mobile and technology-mediated language learning has created new opportunities for vocabulary practice through multimedia resources, interactive tasks, and continuous access. A meta-analysis by (Mihaylova et al., 2022) reported a moderate-to-strong overall advantage of mobile-assisted language learning applications over comparison conditions, although effects varied according to design and context. A systematic review by (Dağdeler, 2023) likewise showed sustained research interest in mobile-assisted vocabulary learning and emphasized that learning outcomes depend on pedagogical and contextual variables.

Within this technological landscape, Moodle provides a learning management environment through which educators can organize course content, distribute resources, administer quizzes, promote interaction, and facilitate access to learning activities. For vocabulary learning, tools such as quizzes, glossaries, forums, audiovisual materials, feedback, and mobile access may facilitate repeated exposure and allow students to revisit learning resources according to individual study needs.

Evidence directly related to Moodle and EFL learning suggests that the platform can support language development when interactive activities are purposefully integrated. (Qaddumi et al. , 2024) examined Moodle-based language-learning activities with undergraduate learners and found positive effects on language acquisition and attitudes. Their study reinforces the view that the educational value of an LMS lies not merely in access to technology but in the quality of the activities implemented through it.

Students' perceptions are an important dimension in evaluating this integration because the educational value of an LMS is partly associated with how learners experience its usability, organization, interaction, and support for learning. (Almusharraf, 2024) showed that university students' perceptions of LMS usability and engagement are closely connected to the quality of their academic learning experiences. More specifically, (Al-Fraihat et al., 2025) examined students' perceptions of Moodle design and use and highlighted the importance of usability, learning support, and system features in shaping learner experience.

Despite the growing body of research on digital and mobile-assisted language learning, context-specific evidence remains necessary. Findings from one educational setting cannot automatically be generalized to another because access to technology, course design, digital competence, institutional practices, and learner characteristics may shape how students use and evaluate virtual learning environments. This need is particularly relevant in EFL teacher-education programs, where students are simultaneously language learners and future educators who may later be expected to integrate digital technologies into their professional practice.

In the National and Foreign Language Pedagogy program at Universidad Estatal del Sur de Manabí, Moodle forms part of the digital learning environment available to students. The classroom project from which this article was derived identified the need to examine students' perceptions of access to vocabulary materials, variety of exercises, interactivity, study organization, recommendation, flexibility, multimedia resources, creativity, and peer collaboration.

Accordingly, the study addressed the following research question: How do university students perceive the integration of Moodle as a support tool for English vocabulary learning? The objective was to analyze



university students' perceptions of Moodle integration as a support tool for English vocabulary learning. A quantitative, non-experimental, descriptive approach was adopted to examine the responses of 31 second-semester students.

Materials and Methods

Research design

The study adopted a quantitative approach with a non-experimental, cross-sectional, and descriptive design. The quantitative approach was appropriate because the study sought to collect numerical data on students' perceptions of Moodle as a support tool for English vocabulary learning. No independent variable was manipulated, and no experimental or control groups were established. Data were collected at one stage of the classroom project, corresponding to a cross-sectional design.

The descriptive scope was selected because the study did not seek to establish causal relationships or objectively measure changes in vocabulary performance. Instead, it aimed to identify and describe participants' perceptions of accessibility, interactivity, flexibility, multimedia resources, learning organization, creativity, and collaborative opportunities associated with Moodle-supported vocabulary learning.

Participants and sampling

The study involved 31 second-semester students from Group A of the National and Foreign Language Pedagogy program at Universidad Estatal del Sur de Manabí, Ecuador. Participants were enrolled in an academic context in which Moodle was used as a digital platform to support learning activities and provide access to educational resources.

A non-probability convenience sampling technique was used because participants were selected on the basis of accessibility, availability, and direct experience with Moodle during their coursework. The sample represented the accessible classroom group rather than a statistically representative population; consequently, the findings were interpreted as context-specific evidence and were not generalized to all university students or all EFL contexts.

Data collection instrument

Data were collected through a structured questionnaire consisting of 10 closed-ended statements. The instrument examined perceived support for vocabulary learning, access to materials, variety of exercises, interactivity compared with traditional methods, organization of vocabulary study, willingness to recommend Moodle, flexibility beyond classroom hours, usefulness of multimedia content, creativity in learning new words, and peer collaboration.

Responses were recorded using a five-point Likert-type scale: Strongly agree, Agree, Neutral, Disagree, and Strongly disagree. The instrument was aligned with the classroom project objectives and allowed the quantitative description of response patterns. The available project documentation did not report expert



validation, pilot testing, or a reliability coefficient; therefore, no claims regarding psychometric validation were made in this article.

Data collection and analysis procedure

The questionnaire was administered to the 31 participants after their experience with Moodle in the academic learning environment. Responses were organized according to the five Likert-type categories. Absolute frequencies and percentages were calculated for each item. For comparative interpretation, Strongly agree and Agree were combined as favorable perceptions, while the original five categories were retained in the summary table to preserve transparency.

The analysis focused on identifying the strongest and weakest response patterns. The 10 original tables and graphs from the classroom project were consolidated into one table because the journal permits no more than two visual resources. The findings were then interpreted in relation to the research objective and contrasted with recent scientific literature.

Ethical considerations

The study analyzed students' perceptions within an educational context. Results were reported at the group level through frequencies and percentages, and no names or personally identifying information were included. The manuscript does not claim formal ethics committee approval because such documentation was not available in the classroom project records. Before journal submission, the authors should confirm and add any documented consent or institutional authorization procedures that were actually followed.

Results and Discussion

The analysis of the 10 questionnaire items revealed an overall favorable perception of Moodle as a support tool for English vocabulary learning. Favorable responses (Strongly agree + Agree) ranged from 67.7% to 83.9%. To improve readability while preserving all results, the findings were organized into two thematic tables in accordance with the journal's limit of two visual resources.

Table 1: Students' perceptions of Moodle as instructional support for English vocabulary learning

Dimension	SA n (%)	A n (%)	N n (%)	D n (%)	SD n (%)	Favorable %
Vocabulary learning support	14 (45.2)	10 (32.3)	5 (16.1)	0 (0.0)	2 (6.5)	77.4
Access to materials	9 (29.0)	15 (48.4)	5 (16.1)	0 (0.0)	2 (6.5)	77.4
Variety of exercises	8 (25.8)	15 (48.4)	6 (19.4)	0 (0.0)	2 (6.5)	74.2
Interactivity	10 (32.3)	14 (45.2)	4 (12.9)	1 (3.2)	2 (6.5)	77.4
Learning organization	9 (29.0)	14 (45.2)	5 (16.1)	1 (3.2)	2 (6.5)	74.2
Flexibility beyond class	10 (32.3)	12 (38.7)	6 (19.4)	1 (3.2)	2 (6.5)	71.0

Note. SA = Strongly agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly disagree. Favorable responses combine Strongly agree and Agree. N = 31.

Instructional support, accessibility, and organization



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Table 1 shows that vocabulary learning support, access to materials, and interactivity each obtained 77.4% favorable responses. The variety of exercises and learning organization reached 74.2%, while flexibility beyond classroom hours obtained 71.0%. These results indicate that students generally valued Moodle as a structured environment for accessing vocabulary resources and engaging with interactive activities.

The similar favorable ratings for access and interactivity suggest that students valued both the availability of resources and the way digital activities changed their engagement with vocabulary content. Learning organization also received a positive evaluation, indicating that the platform may support the structuring of study by centralizing materials and activities. However, flexibility obtained the lowest favorable percentage within this group, which suggests that continuous platform access does not necessarily result in equally strong perceptions of independent study beyond regular class hours.

Table 2: Students' perceptions of engagement and social support through Moodle.

Dimension	SA n (%)	A n (%)	N n (%)	D n (%)	SD n (%)	Favorable %
Recommendation of Moodle	5 (16.1)	17 (54.8)	6 (19.4)	1 (3.2)	2 (6.5)	71.0
Multimedia support	10 (32.3)	16 (51.6)	3 (9.7)	0 (0.0)	2 (6.5)	83.9
Creativity	9 (29.0)	12 (38.7)	7 (22.6)	1 (3.2)	2 (6.5)	67.7
Peer collaboration	11 (35.5)	15 (48.4)	3 (9.7)	0 (0.0)	2 (6.5)	83.9

Note. SA = Strongly agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly disagree. Favorable responses combine Strongly agree and Agree. N = 31.

Multimedia, collaboration, and engagement

Table 2 presents the most prominent findings of the study. Multimedia support and peer collaboration each obtained 83.9% favorable responses, making them the highest-rated dimensions. These results suggest that students particularly valued Moodle when it provided multimodal resources and opportunities for interaction with classmates.

The high rating for peer collaboration also supports the view that Moodle can function as a participatory learning environment rather than merely a content repository. (Qaddumi et al. , 2024) found that Moodle-based EFL activities can support positive language-learning experiences when interaction, engagement, and feedback are built into course design. (Marzuki et al, 2024) similarly showed that successful Moodle use in EFL contexts depends on the strategies educators employ to make platform features pedagogically meaningful.

The strong evaluation of multimedia support indicates that videos, audio, and images were salient components of students' vocabulary-learning experience. Similarly, the high rating for peer collaboration suggests that participants perceived Moodle as more than a repository for instructional materials.



The prominence of multimedia and digital support is consistent with meta-analytic and review evidence showing that technology-assisted vocabulary learning can benefit EFL learners when tools provide repeated exposure, contextualized practice, and purposeful interaction with lexical items (Hao et al, 2021); (Simonnet et al, 2025). (Li et al. , 2021) further showed that university learners can value digitally mediated vocabulary learning for the flexible opportunities it creates beyond conventional classroom practice.

Creativity obtained the lowest favorable response in the entire questionnaire, at 67.7%, and the highest neutral response, at 22.6%. Although the result remained predominantly positive, it revealed greater uncertainty than the other dimensions. A plausible interpretation is that creativity depends more directly on task design than on the platform itself.

Overall, the two tables show that students perceived Moodle most favorably when it offered concrete learning support through multimedia, collaboration, accessible resources, interactivity, and organization. The comparatively lower ratings for creativity, flexibility, and recommendation reinforce the central interpretation of the study: the presence of technology alone is insufficient, and Moodle's educational contribution depends on the pedagogical design of the activities implemented through it.

The findings should be interpreted within the boundaries of the research design. The sample consisted of 31 students from one academic group selected through convenience sampling, and the instrument collected self-reported perceptions. Therefore, the study provides context-specific evidence rather than generalizable conclusions about Moodle effectiveness

Conclusions

This study analyzed university students' perceptions of Moodle integration as a support tool for English vocabulary learning. The findings revealed an overall favorable evaluation across all 10 dimensions. Multimedia support and peer collaboration were the most positively perceived aspects, followed by access to materials, interactivity, and learning organization. These results indicate that students primarily valued Moodle when it provided concrete opportunities to access, practice, organize, and interact with vocabulary content.

The findings also showed that creativity, flexibility beyond classroom hours, and willingness to recommend the platform received comparatively lower, although still favorable, evaluations. This variation demonstrates that the presence of technology alone does not guarantee equally positive experiences across all dimensions. Moodle's educational contribution depends on the pedagogical quality of the activities implemented through it.

The study contributes context-specific evidence from an EFL teacher-education program in Ecuador. From a pedagogical perspective, the findings suggest that Moodle should be used as more than a content-delivery system. Its potential is strengthened when teachers integrate multimedia materials, varied vocabulary activities, collaborative tasks, structured resources, and opportunities for interaction.

The conclusions must be interpreted within the methodological scope of the study. Because the research used a non-experimental, cross-sectional design and a convenience sample of 31 students from one academic group, the findings cannot establish causal relationships or be generalized to broader populations. In addition, the questionnaire measured perceptions rather than direct changes in vocabulary knowledge. The study



therefore does not demonstrate that Moodle itself improved vocabulary performance; it shows that participants perceived the platform as a useful support environment.

Future research should examine whether favorable perceptions correspond to measurable vocabulary gains. Experimental or quasi-experimental studies could incorporate pre-tests and post-tests, comparison groups, and validated vocabulary measures. Longitudinal studies could also investigate vocabulary retention, learner autonomy, and engagement over time, while research on specific Moodle tools could compare the contribution of collaborative glossaries, quizzes, forums, multimedia tasks, and feedback to receptive and productive vocabulary knowledge.

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