



VIRTUAL LEARNING ENVIRONMENTS AND ENGLISH WRITING IN UNIVERSITY STUDENTS

ENTORNOS VIRTUALES DE APRENDIZAJE Y ESCRITURA EN INGLÉS EN ESTUDIANTES UNIVERSITARIOS

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Abstract

The study analyzed university students' perceptions of virtual learning environments as support for English writing practice. A basic descriptive study was conducted using a quantitative approach, a non-experimental design, and a cross-sectional scope. The participants were 23 fifth-semester students from group B of the Pedagogy of National and Foreign Languages program at Universidad Estatal del Sur de Manabí, selected through a census of an intact classroom group. Data were collected through a survey and a structured



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questionnaire with closed-ended items. The information was analyzed using descriptive statistics, frequencies, and percentages. The findings showed frequent use of virtual learning environments, a clear preference for Google Classroom, and positive perceptions of feedback tools and digital resources for supporting writing tasks. It is concluded that virtual learning environments can serve as relevant pedagogical support for English writing practice when they are integrated with teacher guidance, systematic feedback, and clear methodological criteria.

Keywords: English writing; virtual environments; higher education; digital feedback; descriptive research

Resumen

El estudio analizó las percepciones de estudiantes universitarios sobre el uso de entornos virtuales de aprendizaje como apoyo para la práctica de la escritura en inglés. Se desarrolló una investigación básica descriptiva, con enfoque cuantitativo, diseño no experimental y corte transversal. Participaron 23 estudiantes de quinto semestre, paralelo B, de la carrera de Pedagogía de los Idiomas Nacionales y Extranjeros de la Universidad Estatal del Sur de Manabí, mediante una muestra censal de grupo intacto. La técnica de recolección de datos fue la encuesta y el instrumento consistió en un cuestionario estructurado con preguntas cerradas. Los datos se procesaron mediante estadística descriptiva, frecuencias y porcentajes. Los resultados evidenciaron uso frecuente de entornos virtuales, predominio de Google Classroom y valoración positiva de las herramientas de retroalimentación y recursos digitales para apoyar tareas de escritura. Se concluye que estos entornos constituyen un apoyo pedagógico pertinente para fortalecer la práctica escrita, siempre que se integren con orientación docente, retroalimentación sistemática y criterios metodológicos claros.

Palabras clave: escritura en inglés; entornos virtuales; educación superior; retroalimentación digital; investigación descriptiva

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Introduction

English writing is a key academic and professional competence in higher education, particularly in teacher education programs where future language teachers are expected to guide learners in the development of communicative skills. In English as a Foreign Language (EFL) context, writing requires the integration of grammar, vocabulary, organization, coherence, cohesion, and audience awareness. However, students frequently face difficulties in planning ideas, revising drafts, using feedback effectively, and maintaining regular writing practice beyond classroom time.

The expansion of virtual learning environments has created new possibilities for language learning because these platforms allow students to access materials, submit assignments, interact with peers, receive feedback, and revise written tasks asynchronously or synchronously. In this context, writing is no longer limited to the



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physical classroom; it can be mediated through learning management systems, collaborative editors, online dictionaries, grammar checkers, and feedback tools. These resources may support students' autonomy and engagement, but their pedagogical value depends on how teachers integrate them into meaningful learning sequences.

Recent research has reported that online collaborative writing can influence learners' motivation, confidence, and writing performance when digital interaction is supported by clear instructions and feedback mechanisms (Li, 2023). Likewise, research on online feedback has emphasized that digital responses, peer review, and teacher comments can contribute to revision processes in ESL/EFL writing contexts (Lv et al., 2021). Nevertheless, these contributions should not be understood as automatic effects of technology; rather, they depend on pedagogical design, teacher mediation, and students' digital competence.

In Latin American higher education, the use of digital platforms has become more frequent after the consolidation of hybrid and online teaching experiences. Yet, in local university contexts, it remains necessary to describe how students perceive these platforms in relation to specific language skills. This is especially relevant for English writing because the usefulness of virtual learning environments cannot be assumed solely from institutional adoption or platform availability. It is necessary to examine students' actual practices, perceived usefulness, satisfaction, and interaction with feedback tools.

The classroom project that originated this article focused on fifth-semester students from the Pedagogy of National and Foreign Languages program at Universidad Estatal del Sur de Manabí. The problem addressed was the need to understand how students use virtual learning environments for English writing tasks and how they perceive their contribution to writing practice, digital feedback, and the use of technological resources. Therefore, the objective of this study was to describe students' perceptions and practices regarding the use of virtual learning environments as support for English writing in a university teacher education context.

Research gap and contribution of the study

Although virtual platforms are widely used in higher education, their presence in a course does not automatically explain how students experience writing tasks or how they use digital feedback. In many classroom contexts, platforms are adopted for administrative reasons, while their pedagogical potential for writing development remains underexplored. Therefore, the contribution of this study lies in describing the perceptions and practices of a specific group of future English teachers regarding the use of virtual environments for writing practice.

This focus is relevant because writing in English as a Foreign Language (EFL) requires sustained practice, revision, and feedback. Students may complete writing assignments online, but the educational value of those assignments depends on how they are guided, reviewed, and connected to learning objectives. Research on online feedback has demonstrated that feedback can support revision when it is timely and understandable (Lv et al., 2021). However, local classroom evidence is still necessary to understand whether students actually perceive these tools as useful in their regular academic experience.

The study is also relevant for teacher education. The participants are not only learners of English; they are future teachers who will eventually need to design writing tasks, select digital tools, and provide feedback to their own students. For that reason, the analysis of their perceptions offers pedagogical information for



improving language teacher preparation. Virtual learning environments should be examined not only as platforms for submitting tasks, but as spaces where future teachers learn how digital pedagogy can be organized.

This article therefore contributes to the field by connecting three dimensions: students' use of virtual environments, English writing practice, and feedback-mediated learning. Instead of presenting technology as a solution in itself, the study adopts a descriptive and cautious perspective. It recognizes that technology can support writing processes when it is accompanied by teacher mediation, clear criteria, and student awareness of how to use digital resources responsibly.

Theoretical and conceptual basis

Virtual learning environments provide structured digital spaces where teachers can organize content, assign activities, and monitor student participation. In EFL writing, these environments can support the recursive nature of writing because students can draft, submit, receive comments, and revise texts through the same platform. Studies on Google Classroom suggest that students' acceptance of this platform is associated with perceived usefulness, ease of use, and the possibility of managing writing assignments in an organized digital space (Pham & Nguyen, 2024).

Writing development also depends on feedback. Teacher written feedback remains central in EFL contexts because it helps learners notice gaps between current performance and expected performance (Cheng & Zhang, 2021). In virtual environments, feedback may be delivered through comments, rubrics, suggestions, peer review, or automated systems. The literature has shown that online feedback can support revision and learner awareness when students understand how to use the information provided (Lv et al., 2021).

Peer interaction is another relevant dimension. Online peer feedback has been associated with opportunities for collaborative learning, negotiation of meaning, and greater awareness of writing quality (Cao et al., 2022). Technology-supported peer feedback can also expand writing practice beyond classroom time, although its effectiveness depends on task design, assessment criteria, and learners' ability to provide constructive comments (Cuocci, 2023).

Finally, digital tools such as automated writing evaluation systems and artificial intelligence-based feedback platforms have become increasingly visible in language learning. Evidence indicates that automated writing evaluation can influence writing quality and revision processes, but such tools should be integrated critically and not treated as replacements for teacher guidance (Zhai & Ma, 2023). Similarly, AI-generated feedback can provide immediate support, but students still require pedagogical mediation to interpret suggestions and develop independent writing competence (Escalante et al., 2023).

Pedagogical integration of digital feedback

Digital feedback must be understood as part of a broader pedagogical sequence rather than as an isolated technological function. When students write in a virtual environment, they require criteria that indicate what aspects of the text should be revised, how comments should be interpreted, and how feedback should be transformed into a new draft. In this sense, virtual learning environments can help organize feedback cycles, but they do not replace the teacher's role in clarifying expectations and guiding revision. Research on teacher



written feedback has shown that feedback becomes useful when it is specific, comprehensible, and connected to learners' writing goals (Cheng & Zhang, 2021).

The integration of digital feedback is also relevant because students may receive comments from different sources: teachers, peers, automated checkers, and platform tools. This multiplicity of feedback can enrich revision, but it can also generate confusion if learners are not trained to decide which suggestions are accurate and pedagogically relevant. Therefore, the use of online feedback in EFL writing should include reflection activities, revision logs, and opportunities for students to explain the changes made in their texts. Meta-analytic evidence indicates that online feedback can produce positive effects on ESL/EFL writing, but the effects depend on the type, timing, and quality of feedback provided (Lv et al., 2021).

Collaborative writing, autonomy, and teacher education

Collaborative writing is another dimension that connects virtual learning environments with the development of English writing skills. Digital platforms allow students to share drafts, comment on peers' texts, and co-construct ideas. These practices are relevant for teacher education because future language teachers need to experience not only individual writing but also collaborative revision and peer assessment as pedagogical strategies. Studies on online collaborative writing have reported benefits for writing performance, motivation, and self-efficacy when learners participate in guided interaction (Li, 2023).

However, collaboration in digital environments does not emerge automatically. Students need instructions, roles, deadlines, and assessment criteria. Without these elements, collaborative tools may become spaces for superficial comments rather than meaningful revision. Research on online peer feedback has emphasized that learners can gain from peer interaction when feedback tasks are structured and when students understand how to evaluate writing quality (Cao et al., 2022). For this reason, the study of students' perceptions in the present research is valuable because it offers contextual evidence about how future teachers interact with writing tasks in virtual spaces.

Automated tools and responsible digital literacy

The use of grammar checkers, spelling tools, and automated writing evaluation systems requires responsible digital literacy. These tools can support editing and reduce the cognitive load associated with surface-level correction, but they may also encourage dependence if students accept suggestions without reflection. In EFL writing instruction, digital tools should be presented as resources for revision, not as substitutes for language learning. Automated writing evaluation has shown effectiveness in improving some aspects of writing quality, but its pedagogical value depends on how students and teachers use the feedback (Zhai & Ma, 2023).

The recent expansion of artificial intelligence-based feedback has increased the need for critical guidance. AI-generated feedback can provide immediate responses and additional revision support, but students must learn to assess the accuracy, relevance, and limitations of such suggestions. This is especially important in higher education, where writing competence involves argumentation, coherence, and disciplinary purpose, not only grammar correction (Escalante et al., 2023). Therefore, virtual learning environments should be accompanied by explicit instruction on academic integrity, responsible tool use, and independent revision strategies.

Materials and methods



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This study was conducted under a quantitative approach and a basic descriptive scope. The purpose was to describe students' perceptions and practices regarding the use of virtual learning environments in English writing tasks. The research did not seek to test the effectiveness of a treatment or establish causal relationships; therefore, descriptive methodological orientation was the most appropriate for the available data.

The design was non-experimental and cross-sectional. It was non-experimental because no variables were manipulated, no treatment groups were created, and no controlled intervention was applied. The phenomenon was observed in its natural academic context. It was cross-sectional because the information was collected at a single moment during the academic period.

The study was carried out at Universidad Estatal del Sur de Manabí, in the Pedagogy of National and Foreign Languages program. The participants were 23 fifth-semester students from group B, morning schedule. Since the complete classroom group participated, the study used a census sample of an intact group. This decision was coherent with the descriptive scope of the research and limits interpretation to this specific academic context.

The data collection technique was a survey. The instrument was a structured questionnaire with closed-ended questions organized around four dimensions: use of virtual learning environments for English writing, platform preference, feedback and revision practices, and use of digital tools. Most items used a five-point frequency scale: never, rarely, sometimes, often, and always.

The procedure followed four stages. First, the research problem and objective were defined based on the classroom project. Second, the questionnaire was organized according to the dimensions of the study. Third, the instrument was applied to the 23 participating students. Fourth, the responses were tabulated and analyzed through descriptive statistics.

Frequencies and percentages were calculated for each questionnaire item. No inferential statistical tests were applied because the study did not seek to compare groups, predict outcomes, or test hypotheses. Consequently, the findings should be interpreted as contextual descriptive evidence about one intact classroom group rather than as generalizable or experimental results.

Results and discussion

The results are presented according to the descriptive purpose of the study. The first group of results concerns the frequency of virtual learning environment use, perceived support for writing, frequency of writing activities, use of feedback functions, instructor feedback, and use of digital writing tools. These indicators were selected because they reflect the relationship between platform use and writing practice from students' perspectives.



Table 1: Frequency distribution of students' perceptions and practices in virtual learning environments.

Indicator	Never	Rarely	Sometimes	Often	Always
Use of VLEs for English writing tasks	0 (0%)	3 (13.04%)	7 (30.43%)	7 (30.43%)	6 (26.09%)
Perceived support for English writing skills	0 (0%)	2 (8.70%)	13 (56.52%)	5 (21.74%)	3 (13.04%)
Writing activities in VLEs	0 (0%)	3 (13.04%)	4 (17.39%)	7 (30.43%)	9 (39.13%)
Use of platform feedback functions	0 (0%)	3 (13.04%)	2 (8.70%)	6 (26.09%)	12 (52.17%)
Helpful instructor feedback in VLEs	0 (0%)	4 (17.39%)	8 (34.78%)	6 (26.09%)	5 (21.74%)
Use of digital writing tools	0 (0%)	1 (4.35%)	9 (39.13%)	10 (43.48%)	3 (13.04%)

Table 1 shows that most participants used virtual learning environments with some degree of regularity for English writing tasks. The combined percentages of sometimes, often, and always reached 86.95%, which indicates that these environments were already integrated into students' academic routines. However, the distribution also suggests that the frequency of use was not homogeneous; only 26.09% reported always using them for writing tasks. This finding supports the interpretation that the platforms were relevant but not uniformly central for every student.

Regarding perceived support for English writing skills, 56.52% of students selected sometimes, while 21.74% selected often and 13.04% selected always. These results indicate a moderate positive perception rather than a strong claim of improvement. This distinction is important because the study did not measure writing performance through a rubric or pretest/posttest design. The finding is better understood as evidence that students perceived virtual environments as useful supports for writing practice. Similar studies have reported that online collaborative writing may benefit learners when digital interaction is guided by clear tasks and feedback (Alqasham, 2022).

Writing activities were frequent in the group: 39.13% of participants reported always completing writing activities in virtual environments and 30.43% reported often doing so. This result is pedagogically relevant because regular writing practice is essential for developing organization, coherence, and revision habits. The finding also aligns with research indicating that collaborative digital writing environments can strengthen writing motivation and self-efficacy when students engage in structured tasks (Li, 2023).

The use of platform feedback functions was one of the strongest results. More than half of the students, 52.17%, reported always using comments, suggestions, or similar tools, while 26.09% reported often using them. This suggests that feedback functions constituted a central element of the virtual writing experience. From a pedagogical perspective, this result is consistent with the idea that digital environments are valuable not merely because they store assignments, but because they facilitate cycles of feedback and revision. Research on teacher written feedback has emphasized that students' writing development depends on the quality, clarity, and usability of feedback (Cheng & Zhang, 2021).

The results for instructor feedback were positive but less consistent. Although 82.61% of participants reported receiving helpful feedback at least sometimes, 17.39% indicated that they rarely received it. This variation suggests the need for more systematic feedback practices in virtual writing instruction. Technology alone does not guarantee formative assessment; teachers must define when, how, and for what purpose feedback will be provided. Technology-enhanced formative assessment can support writing when feedback is timely, actionable, and connected to learning objectives (Huang et al., 2024).



The use of digital tools such as grammar checkers, spell checkers, and online dictionaries was also common. A total of 82.61% of students used these tools sometimes, often, or always. This finding indicates that students relied on additional digital support while writing in English. The result should be interpreted carefully: frequent tool use does not automatically imply independent writing competence, but it reveals that students recognize the value of digital resources for checking, revising, and improving drafts. Studies on automated writing evaluation have reported positive effects on writing quality, yet these tools are most beneficial when used critically and in combination with teacher guidance (Zhai & Ma, 2023).

Table 2: Most frequently used virtual learning platform for English writing practice.

Platform	Frequency	Percentage
Moodle	1	4.35%
Google Classroom	21	91.30%
Edmodo	1	4.35%
Microsoft Teams	0	0%
Other	0	0%
Total	23	100%

Table 2 shows a clear predominance of Google Classroom as the most frequently used platform, selected by 91.30% of participants. Moodle and Edmodo represented only 4.35% each, while Microsoft Teams and other platforms were not selected. This concentration suggests that, in the studied group, students' virtual writing experience was strongly mediated by Google Classroom. Such preference may be associated with accessibility, familiarity, organization of assignments, and ease of receiving comments or submitting written tasks.

This result is consistent with recent findings on students' acceptance of Google Classroom in EFL writing classes, where perceived usefulness and ease of use are central factors for adoption (Pham & Nguyen, 2024). The predominance of one platform can be pedagogically advantageous because it reduces fragmentation and allows students to become familiar with a consistent digital workflow. However, it also suggests that the quality of the writing experience depends heavily on how that platform is used. If Google Classroom functions only as a repository for assignments, its pedagogical impact may be limited. If it is used to organize drafting, peer review, revision, feedback, and reflection, it can become a more meaningful writing environment.

The discussion of these findings must consider the nature of the study. Since the research was descriptive and based on perceptions, the results do not prove that virtual learning environments caused measurable improvement in writing performance. Instead, they show that students perceived these environments as useful for practicing writing, using feedback, accessing digital tools, and completing writing tasks. This interpretation is methodologically safer and more coherent with the research design.

From an educational perspective, the findings suggest three implications. First, virtual learning environments should be integrated into writing instruction through explicit pedagogical objectives rather than used only for administrative purposes. Second, feedback practices must be planned and standardized so that all students receive meaningful guidance. Third, digital tools should be accompanied by critical digital literacy, because students need to understand the limitations of automated suggestions, grammar checkers, and online



resources. These implications are relevant for teacher education programs, where future English teachers must not only use technology but also evaluate its pedagogical value.

Implications for teacher education and curriculum design

The findings also have implications for curriculum design in language teacher education. Future English teachers need opportunities to develop writing competence while simultaneously learning how to use virtual platforms pedagogically. This dual preparation is important because digital tools are not neutral additions to instruction; they shape how tasks are presented, how feedback is delivered, and how students participate in revision. In this sense, a teacher education curriculum should include guided experiences in designing writing activities through learning management systems and collaborative platforms.

A second implication concerns assessment. Virtual environments can facilitate continuous assessment because they preserve drafts, comments, and evidence of student participation. This allows teachers to move beyond isolated final products and evaluate the writing process. However, such assessment requires clear rubrics and transparent criteria so that students understand how their writing will be evaluated. Formative assessment supported by technology can be useful when feedback is aligned with criteria, when students are required to revise, and when teachers monitor progress over time (Huang et al., 2024).

A third implication concerns learner autonomy. The use of dictionaries, grammar checkers, and platform-based suggestions may help students identify errors and improve drafts, but autonomy does not mean working without guidance. In EFL writing, autonomy should be understood as the ability to make informed decisions during planning, drafting, revising, and editing. Teachers can support this process by asking students to justify which digital suggestions they accepted, rejected, or modified in their final texts.

Finally, the dominance of Google Classroom in the study suggests that institutional and classroom decisions about platforms matter. When a single platform becomes the main space for writing tasks, teachers should exploit its functions fully: assignment sequencing, draft submission, comments, rubric-based assessment, peer interaction, and reflective follow-up. A platform-centered writing workflow can be pedagogically useful if it is not limited to uploading and downloading assignments, but connected to active writing processes, feedback cycles, and collaborative revision.

The main limitation of the study was the size and scope of the participant group. The research was conducted with 23 students from one classroom group; therefore, the findings should not be generalized to all students in the program or to other institutional contexts. Another limitation was the use of self-reported data, which describes perceptions and practices but does not directly assess writing quality. Future studies should include writing samples, analytic rubrics, pretest/posttest designs, and larger samples from different semesters or institutions.

Recommendations for future research and pedagogical practice

Future research should move from descriptive perception-based studies to designs that directly examine writing products. For example, researchers could collect drafts before and after a structured virtual writing sequence, evaluate them with analytic rubrics, and compare changes in organization, coherence, vocabulary, grammar, and mechanics. This would allow stronger claims about writing development than those possible in the present study.



Pedagogically, teachers should design writing activities that include stages of planning, drafting, feedback, revision, and reflection. Virtual learning environments are especially useful when they allow evidence of each stage to be stored and reviewed. This process-oriented use of platforms is more consistent with current writing pedagogy than an approach limited to the submission of final assignments.

Institutions should also support teachers through professional development focused on digital feedback, platform management, assessment rubrics, and ethical use of automated writing tools. If students are expected to use digital resources responsibly, teachers also need institutional support to design tasks that promote academic integrity and meaningful learning.

Conclusions

Virtual learning environments were perceived by the participating students as relevant support for English writing practice, especially because they facilitated access to writing activities, feedback functions, and digital tools.

The study confirmed the predominance of Google Classroom in the analyzed group, which suggests that platform familiarity and accessibility played an important role in students' virtual writing experience.

The frequent use of feedback functions indicates that digital comments and suggestions can support revision processes; however, instructor feedback must be more systematic to ensure consistent formative guidance for all students.

The results should be interpreted as descriptive evidence from one intact classroom group and not as experimental proof of improvement in writing performance.

Future research should expand the sample, include direct assessment of written products, and compare virtual writing practices across different semesters, platforms, and instructional designs

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