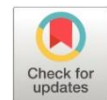# Moodle platform forums in the English language writing skills improvement

Los foros de la Plataforma Moodle en el mejoramiento de la escritura del Idioma Inglés

[1] Noemi Mercedes Remache Carrillo https://orcid.org/0000-0002-0205-0410
Unidad Educativa Riobamba, Magister en la Enseñanza del Inglés como Lengua Extranjera, Riobamba, Chimborazo, Ecuador
noemi.remache@educación.gob.ec

[2] Sandra Paulina Porras Pumalema https://orcid.org/0000-0001-6571-9938
Escuela Superior Politécnica de Chimborazo (ESPOCH), Carrera de Mantenimiento Industrial, Magister en la Enseñanza del Inglés como Lengua Extranjera, Riobamba, Chimborazo, Ecuador
sandra.porras@espoch.edu.ec

[3] Daysi Valeria Fierro López https://orcid.org/0000-0003-3694-7143
Universidad Nacional de Chimborazo (UNACH), Facultad de Ciencias de la Educación Humanas y Tecnologías Pedagogía de los Idiomas Nacionales y Extranjeros, Magister en Lingüística Aplicada al Aprendizaje del Idioma Inglés,
Riobamba, Chimborazo, Ecuador
dfierro@unach.edu.ec

[4] Diana Carolina Campaña Días https://orcid.org/0000-0002-7608-4090
Escuela Superior Politécnica de Chimborazo (ESPOCH), Carrera de Software, Magister en la Enseñanza del Inglés como Lengua Extranjera, Riobamba, Chimborazo, Ecuador
diana.campania@espoch.edu.ec

Palabras claves:

Foro de la plataforma Moodle, escritura, habilidades, contenido, organización, idioma

Resumen

Introducción: Aprender inglés es una de las metas más importantes que deben seguir los estudiantes, ya que es la clave para un futuro exitoso en todos los campos de la humanidad. **Objetivo**: Esta investigación tuvo como objetivo determinar la efectividad del uso de los foros de la plataforma Moodle para mejorar las habilidades de escritura en el idioma inglés. Para lograr este objetivo, las investigadoras trabajaron con una población total de 84 estudiantes que pertenecían a segundo nivel. **Metodología**: Se desarrolló un diseño de investigación cuasiexperimental con dos grupos de estudiantes: el grupo de control y el grupo experimental. Para recopilar datos, utilizaron el examen KET A2 para escuelas, específicamente las preguntas de escritura. Además, utilizaron una rúbrica de la evaluación de Cambridge para transformar datos cualitativos en numéricos para condensarlos y analizarlos. Después de recopilar datos de la prueba previa (pre-test), las investigadoras diseñaron una intervención en el aula que duró 10 semanas. La intervención consistió en planificar un conjunto de actividades prácticas para el grupo experimental que finalizaba con una pregunta para ser respondida en la plataforma Moodle, comentada por los estudiantes y retroalimentada por las investigadoras; mientras que los alumnos del grupo de control continuaron con sus clases tradicionales. **Resultados**: después de la intervención, los estudiantes de los dos grupos realizaron el post-test. Finalmente, con un 95% de confiabilidad, se encontró diferencia significativa en los resultados del grupo experimental. **Conclusión**: por lo tanto, se determinó la efectividad de los foros de la plataforma Moodle para mejorar las habilidades de escritura de los estudiantes.

Keywords:

Moodle platform forum, writing, skills, content, organization, language

Abstract

Introduction: Learning English is one of the most important goals that students must follow due to it is the key to a successful future in all fields of humanity. **Objective**: This research aimed to determine the effectiveness of using the Moodle platform forums in the English language writing skills improvement. In achieving this goal, the researchers worked with a total population of eighty-four students who belonged to second level. **Methodology**: They developed a quasi-experimental research design with two groups of students: the control and experimental group. To collect data, they used the KET A2 for school's exam, specifically the writing

questions. Furthermore, they used a rubric from Cambridge assessment to transform qualitative into numerical data to be condensed and analyzed. After gathering data from the pre-test, the researchers designed a classroom intervention which lasted 10 weeks. The intervention consisted in planning a set of practical activities for the experimental group which ended with a question to be answered in the Moodle platform, commented by the students, and provided feedback by the researcher, while the students in the control group continued with their traditional classes. **Results:** After the intervention, the students from two groups took the post-test. Finally, with 95% of reliability, significant difference was found in the results of the experimental group. **Conclusion**: Therefore, the effectiveness of the Moodle platform forums to improve the students' writing skills was determined.

Introduction

The English language ranks third among the most widely spoken languages worldwide and is used in all areas of knowledge and human development (Crystal, 2003). As it is a language that serves as tool for communication with people from different countries within this globalized world (Northrup, 2013), there is a need to teach it in a way in which students can acquire it, motivating their creativity and dynamism; leaving aside traditional and little participatory education (Beltran, 2017).

However, the COVID-19 pandemic started, and the education has drastically changed into a virtual one in a way of working names as telework (Ministerio de Trabajo del Ecuador, 2020). The urgent transformation demanded by traditional educational systems and the importance of having a virtual educational strategy, as well as students and teachers with skills and competencies for teaching and learning in cyberspace, were highlighted during the COVID-19 pandemic, when face-to-face activities were suspended worldwide (Cepeda et al., 2021; Remache et al., 2021). Therefore, students and teachers faced a totally different way in the teaching-learning process (Cepeda et al., 2021). For that reason, some platforms were sought to work in synchronic classes and other were adopted for asynchrony ones. An access to achieve this was the implementation of a virtual educational environment known as the Moodle platform (Remache et al., 2021).

Moodle is a learning platform that allows educational institutions and businesses to establish and administer virtual classrooms to instruct a community of students in specific areas of knowledge. Moodle, developed by Martin Dougiamasen in 2002, directs and coordinates the platform, which is funded by a worldwide network of over eighty service

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firms (Moodle, 2021). This platform is open source (Free Software) and licensed under the General Public License, which means it is both free and copyrighted (Moodle, 2021), allowing developers, educators, and organizations from all over the world to share knowledge and help improve, change, and adapt the software to their specific needs. Moodle's educational foundations are based on constructionist pedagogy, in which subjects build their own understanding and knowledge about the world through their experience (Sesento, 2020). Moreover, the competency model, consists of an active methodology and continuous evaluation, aimed at collaboration and cooperation between students in a specific context that allows evaluation and feedback on the learning process (Neve, 2017). As a result, Moodle's features are "a tremendous tool for the integral formation of the learner (Moodle, 2021).

Moodle includes several pedagogical tools that enable tailored instruction for any number of students. Moodle 3.11 introduces new and improved features, such as the ability to customize the site to the institution's and organization's needs, as well as the addition of plugins and certified integrations with third-party software, such as videoconferencing tools and attendance trackers, which are installed in the platform to improve its functionality (Pérez et al., 2020). It also assures multilingual accessibility and support for all types of online learning, including fully online, blended, individual, and collaborative learning (Moodle, 2021).

In terms of security, Moodle provides its customers with a design that allows them to maintain complete control over their data in compliance with local laws, regularly checking their security and privacy from any computer with an internet connection. Because the platform can run on mobile devices, it requires an internet connection. The characteristics of this platform have prompted various colleges and organizations around the world to embrace it as an e-learning training resource, giving instruction to over two hundred million people (Moodle, 2021).

Regarding to the second variable, it is dared to remark in the level of students' performance in English. According to Education Frist (2021), there is a low level of English in Ecuador. It is located among the lowest scores worldwide. Therefore, it is essential to support students in their English language learning with tools that are useful. Especially in the writing skills, the students face some difficulties namely grammar, coherence, omission, among others (Cisneros et al., 2014).

According to Cisneros et al. (2014) the students show awkwardness for some reasons. First, the students get confused with verb tenses, the use of conjunctions, and transition words. This might happen because the teaching process was not well-focused. Besides, students overgeneralize rules like the ending -ed in verbs in past or de -s at the end in the third forms in present (Gallegos, 2018). Moreover, there are some difficulties in word order within a sentence. Sometimes, students fossilize some mistakes that are hard to

forget which was also argued by Yule (2010). Consequently, the students lack coherence and accuracy in their written productions (Gamboa, 2020). It must be also mentioned that it was noticed that students overuse translators to present their works which means extremely dependance on it. All these facts bring somehow demotivation to learn English (Asmali, 2017).

Motivated by these concerns, the author aimed to determine the effectiveness of the use of the Moodle platform Forums in the writing ability of second-level students of the Cambridge Extension at the Escuela Superior Polytechnical de Chimborazo. The knowledge that emanates because of this work will allow a better organization of the corrective work, as well as redirect future teaching works. It would be possible to develop and perfect the writing ability and therefore contribute to the improvement of the students' written communicative competence.

Methodology

This article is the result of a quasi-experimental study carried out in the academic period February-April 2022. The quasi-experimental design of the research allowed to verify the hypotheses raised at the beginning of the study (Cohen et al., 2007). In doing this, two previously established similar groups were formed, an experimental group and a control group. To compare results before and after the intervention, a pretest and posttest were applied to both to measure the dependent variable, English language written production. Furthermore, the collection of information, taken directly from first level students, places this study as field research (Hernández et al., 2010). Its purpose was to systematically analyze the information, collected through the application of a pretest and posttests, to describe and explain the effectiveness of the application of a study variable: the Moodle virtual classroom forums (independent variable) and the written production (independent variable) (Creswell, 2015).

Due to the population of this research was small, the researcher worked with the universe. The population for both the control and the experimental groups came from the secretariat office without modifications as the table one shows.

Table 1

Population

	Male	%	Female	%	Total	%
Experimental group	17	40%	25	60%	42	50%
Control group	19	45%	23	55%	42	50%
Total	36	43%	48	57%	84	100%

Fuente: Cambridge Extension Secretariat office (2022)

As it was displayed by the table above, there were eighty-four students in total who are made of 57% of female population.

The intervention entailed a series of theoretical-practical activities that incorporated aspects linked to the language skills, centered on the writing. The actions were primarily focused on elements connected to reading and listening for written interpretations. The first step was to determine the level of proficiency in the writing skills using a diagnostic test (pre-test), the findings were combined with the students' self-perception using a self-administered questionnaire prepared expressly for the study.

From the identification of the needs, it was decided to emphasize the use of the Forums of the Moodle platform, because this was the official tool during the virtual classes in the pandemic. Theoretical-practical actions focused on writing skills aimed at eliminating shortcomings and consolidating knowledge were outlined.

Thus, an intervention was conducted that consisted of a series of classes for 10 weeks with each activity lasting one hour. In each teaching activity, an initial knowledge exploration task and a final knowledge assimilation question were applied. Each student wrote either an e-mail or a short story and the students had to comment their partners' production. They had to do it at least in a couple of works. The teacher provided feedback for both the author and the comments to correct mistakes. After receiving feedback from their partners and teacher, the students had to write their final draft in a Microsoft word file to collect those written productions as a kind of portfolio. On the other hand, the same procedure was applied with the students from the control group with the difference that the teacher did not provide any feedback. At the end of the intervention, the A2 KET for schools in the writing part specifically (post-test) research test was applied again to check the level of knowledge and skills of the students. The writing skills were evaluated through a rubric from Cambridge assessment web page which contained three main criteria namely organization, content, language. These criteria had five bands as well.

Moreover, during the pretest, a questionnaire created specifically for the research was also applied, which aimed to obtain information related to the characteristics of the students and to explore their self-perception related to their skills of the English language. Furthermore, the pre-test and the post-test had two main questions. The first one consisted in writing a short e-mail or message; and in the second question, the students had to write a short story based on the set of pictures provided.

Subsequently, the statistical program Statistical Product and Service Solutions in its version 20.5 for Windows was used. Measures of central tendency and dispersion for quantitative data were identified. The non-parametric Mann-Whitney U test was used to determine differences in the means related to English language writing skills in students before and after the classroom intervention. The confidence level defined was 95%, the

margin of error was 5%, and statistical significance was defined at p=0.05. The results were expressed through tables and statistical graphs to facilitate their understanding and interpretation.

Results and Discussion

After doing data processing the following results appeared.

At the beginning, the students took a survey through Google forms which helped to obtain general information about the students' backgrounds in terms of personal data and their self-perception related to their language skills difficulties. Those data were tabulated and homogenized to be analyzed through in an Excel file.

Table 2

Survey. population general information data

	Total population
	84 students
Average age	18,63 years - Standard Deviation 1,259 years
English language level (self-perception)	
Low	68 (81 %)
Mean	12 (14 %)
High	5 (5 %)
Major problems in language skills (self-perception)	
Reading	40 (48%)
Listening	56 (67%)
Speaking	84 (100%)
Writing	84 (100%)

Created by: Remache

As it was stated in the table 2, the students ranged from 17 to 21 years old, and the average was 18.63 with 1,259 as the standard deviation. According to the students' self-perception, most of them have low level and mostly struggle in the productive skills of the language namely writing and speaking.

Table 3

Pre-test. student's distribution according to writing assessment subskills for a2 key for schools (control group)

WRITING SUBSKILLS	LEVEL					
	Low		Average		High	
	No.	%	No.	%	No.	%
Content	26	62	16	38		
Organization	39	93	3	7		
Language	39	93	3	7		
TOTAL	42					

Source: Pre-test: KET A2 for Schools (Writing questions- control group)

Table 3 shows the control group students' performance related to writing skills in the pre-test. It is clearly stated that most of the students had a low level. The lowest scores appeared in the subskills of language and organization with 93% of the total population. They used basic vocabulary with isolated words or phrases. Furthermore, they produced few simple grammar structures with limited control. This was followed by another subskill such as content with 62% of the population. It meant that students did not understand the task and the message lacked meaning. Only 38% of the population showed average level which meant that their performance was located between the bands 1 and 3 of the assessment rubric.

Table 4

Pre-test. student's distribution according to writing assessment subskills for a2 key for schools (experimental group)

WRITING SUBSKILLS	LEVEL					
	Low		Average		High	
	No.	%	No.	%	No.	%
Content	24	57	18	43		
Organization	33	79	9	21		
Language	34	81	8	19		
TOTAL	42					

Source: Pre-test: KET A2 for Schools (Writing questions- Experimental group)

Like the data obtained from the control group, the experimental one showed a low level in the pre-test. The lowest score was from the subskill of language with 81%. It was followed by organization with 79% of the population. On the other hand, 43% of the

population had average level in content which was followed by 21% of them in organization, an 19% in language.

Table 5

Pre-test (comparison of means)

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	Experimental	42	3.48	1.234	.190
	Control	42	3.17	.824	.127

Independent Samples Test

		Levane's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre-test	Equal variances assumed	9.312	.003	1.352	82	.180	.310	.229	-.146	.765
	Equal variances not assumed			1.352	71.481	.181	.310	.229	-.147	.766

Source: Pre-test: KET A2 for Schools (Comparison of means)

Having obtained the general results from the pre-test, table 5 displays that the experimental group obtained 3.48. On the other hand, the control group had 3.17 out of 15. This clearly stated that both groups had a low level of writing skills performance. Furthermore, in the independent test for equality of variances, the 2-tailed significance was .310 which is > .05. This means that as the experimental group as the control group have a low level of performance; consequently, they were in the same level.

Table 6

Post-test. student's distribution according to writing assessment subskills for a2 key for schools (control group)

WRITING SUBSKILLS	LEVEL					
	Low		Average		High	
	No.	%	No.	%	No.	%
Content	22	52	20	48		
Organization	30	71	12	29		
Language	29	69	13	31		
TOTAL	42					

Source: Post-test: KET A2 for Schools (Writing questions - Control group)

The students from the control group, took the post-test and the results are displayed in the table 6. After 10 weeks of regular classes, most of the students remained in the same low level. Just a few of them slightly improved. The outstanding improvement is showed in the subskill of content because 48% is in the average level. However, nobody achieved the high.

Table 7

Post-test. student's distribution according to writing assessment subskills for a2 key for schools (experimental group)

WRITING SUBSKILLS	LEVEL					
	Low		Average		High	
	No.	%	No.	%	No.	%
Content			38	90	4	10
Organization	1	2	37	88	4	10
Language			38	90	4	10
TOTAL	42					

Source: Post-test: KET A2 for Schools (Writing questions - Experimental group)

In the table 7, it is clearly observed that after the classroom intervention, there were some significant changes in each writing subskill. Therefore, it is stated that the students' scores have increased from low to average level. It is visible that 90 % of the population obtained average level in both subskills: language and content. Furthermore, 88% of the students improved in the subskill of organization. On the other hand, only a few students achieved the elevated level.

Table 8

Mann-whiney u test: pre-test – post-test

Test Statistics [a]		
	Pre-test	Post-test
Mann-Whitney U	757.500	11.000
Wilcoxon W	1660.500	914.000
Z	-1.159	-7.879
Asymp. Sig. (2-tailed)	.246	.000
a. Grouping Variable: Group: Experimental and control		

Source: Mann-Whitney U Test

At the beginning of this study, both the control and the experimental group have the same level of writing skills performance; this fact is abridged in the table 7 which depicts that the two tailed significance was .245 which is > .05. On the contrary, it is stated that for the post-test, the results were different. Therefore, there was a significant difference between the results for the control and the experimental group. Hence, the two tailed significance was .000 which is < .05. This means that the intervention using forums in the Moodle platform contributed to improve the student's writing skills.

Mastering the English language has become necessary for Ecuadorian professionals. This fact will allow to know other cultures and lifestyles, habits, and customs. It is also a particularly important language to improve access to education. It not only allows you to study abroad but also to access academic information such as essays and scientific texts published in English (Crystal, 2003).

During the development of the research, a predominance of female students was obtained. On the other hand, when conducting a search for other studies related to the subject, two references could be found regarding the Cambridge extension (Remache et al., 2019). In addition, data is, in some way, like that reported in another study conducted in the Mechanics career, since the Moodle platform is used to improve the level of English of students whose age is like the population object of this study (Remache et al., 2021).

This result, joined with the students' self-perception of English language proficiency, demonstrates the need to perform actions that improve university students' skills in this regard. The actions must be designed and applied from the moment students start in higher education institutions. This will make it possible, in a certain sense, to discover the language deficiencies that students have when arrive at the higher education. One solution to help students would be to incorporate the basic knowledge of the English language classes together with the other subjects taught in the leveling workshops.

When performing the initial diagnostic test (pre-test), alarming results were obtained in relation to the students' level of English language performance in all skills. Then, other actions to solve these inconveniences would be to start with research and classroom interventions at the basic education and high school level. This result was like that found in the study conducted on mechanical engineering and Cambridge extension students; which shows a deficient preparation prior to entering the university of the students (Remache et al., 2021; 2019).

One of the causes of the low level of students in the use of the English language may be related to the change in study modality due to the pandemic, which generated great challenges for which the educational system was not prepared (Cepeda et al., 2021). This situation joins the shortcomings in the secondary education system where the necessary environment for the acquisition of a second language does not exist (Education First, 2021). In addition, there is the mentality of families who seek promotion instead of learning (Asmali, 2017).

Furthermore, the authors used practical activities to consolidate the skills connected to writing and its sub-skills such as content, organization, and language when implementing the educational intervention. Those actions allowed the students during the study to improve their writing skills levels in a brief period. This finding supports the premise that using the Moodle platform forums in conjunction with the researchers' input and feedback to improve students' writing is effective. In other words, this research aided in the implementation of modifications in teaching planning that resulted in enhanced teacher performance and student learning.

Finally, the results of the Mann-Whitney U test, when comparing the results from the pre-test and post-test of both the control and the experimental group, showed a confidence level of 95%. That means the classroom intervention applied caused significant changes in the students from the experimental group writing skills.

Conclusions

- The effectiveness of the use of the Moodle platform Forums in the writing skills of second-level students of the Cambridge Extension at the Escuela Superior Polytechnical de Chimborazo was determined. Furthermore, the forums in the Moodle platform are suitable to work online in the synchronic classes with satisfactory results. Besides, the students interact among them without stress or worrying which improves their learning environment. Therefore, it is highly recommended to use them to strengthen the students' written production.

References

Asmali, M. (2017). Young Learners' Attitudes and Motivation to Learn English. *Novitas-ROYAL (Research on Youth and Language) 11 (1)*, 53-68.

Beltran, M. (2017). El aprendizaje del idioma inglés como Lengua Extranjera. *Dialnet*, 91-98

Cambridge Extension Secretariat office (2022). *Extensión Cambridge secretaría. Listas de Estudiantes.*

Cepeda, L., Cejas, M., & Vinueza, P. (2021). *La COVID-19 en el Ámbito de la Educación Superior: Aportes de Estudios Multidisciplinarios en el Contexto de la Pandemia.* Riobamba: FEDUEZ- UNELLEZ-VENEZUELA.

Cisneros, J., Vázquez, M., & Peillón, O. (2014). Causas de errores de escritura en Inglés I y II de los estudiantes de Estomatología. *Multimed Vol. 18, No. 3*, 1-10. http://www.revmultimed.sld.cu/index.php/mtm/article/view/72/1204.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education.* New York: Routledge.

Creswell, J. (2015). *Educational Research. Planning, Conducting, and Evaluating Quantitative and Qualitative Research. Fifth Edition.* New Yersey: Pearson.

Crystal, D. (2003). *English as a Global Language.* New York: Cambridge University Press.

Education First. (2021). *Índice del EF English Proficiency.* Retrieved from https://www.ef.com.ec/epi/regions/latin-america/ecuador/

Gallegos, K. (2018, March 1). *Online forums and the writing skill development in students of third year of BGU at" Augusto N. Martínez" High School from Ambato city, Tungurahua province.* https://repositorio.uta.edu.ec/handle/123456789/27367

Gamboa, J. (2020, November 20). *Outlining and the writing skill.* https://repositorio.uta.edu.ec/handle/123456789/31650

Hernández, R., Fernández, C., & Baptista, M. (2010). *Metodología de la Investigación.* México: The McGraw-Hill Companies, Inc.

Ministerio de Trabajo del Ecuador. (2020). *Acuerdo Ministerial N. MDT- 2020 - 076.* https://www.trabajo.gob.ec/wp-content/uploads/2020/03/ACUERDO-MDT-2020-076-TELETRABAJO.pdf?x42051

Moodle. (2021). *Moodle.* https://moodle.org/?lang=es

Neve, M. (2017). *"Moodle" como herramienta para el aprendizaje de inglés como lengua extranjera: un estudio de caso.* https://repositorio.iberopuebla.mx/bitstream/handle/20.500.11777/3354/Neve%20Brito%20Mar%C3%ADa%20Guadalupe.pdf?sequence=2&isAllowed=y

Northrup, D. (2013). *How English became a Global Language.* New York: Routlegde Press.

Pérez, S., Expósito, M., Ortiz, G., Castro, M., Soto, V., & Mustelier de León, R. (2020). Utilización de la plataforma Moodle en la disciplina Informática Médica de la carrera de Medicina. *Edumecentro, 12(2)*, 37-48.

Remache, N., Porras, S., Campaña, C., & Garcés, M. (2021). MOODLE platform as a didactic support for the English language skills improvement. *Conciencia Digital Vol. 4 Núm. 1.2 (2021)*, 358-371.

Remache, N., Yánez, V., & Pilco, M. (2019). Storytelling strategy to improve coherence in writing skills development. *Explorador Digital*, 123-14. https://doi.org/10.33262/exploradordigital.v3i3.1.873.

Sesento, L. (2020). El Constructivismo. *Milenaria, Ciencia y arte, (17)*, 35-37.

Yule, D. (2010). *The Study of Language.* New York: Cambridge University Press.

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