

Beyond the Pencil: Blogging for Better Written Expression in the Primary Classroom

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Abstract—This study examined the potential effectiveness of blogs as a pedagogical tool in developing primary school students' written expression. A quasi-experimental design was used with a sample of 200 male and female tenth-grade students purposefully selected from 10 private schools in Amman, the capital city of Jordan. The participants were divided into two groups: an experimental group that received writing instruction through electronic blogs and a control group taught using traditional methods. A written expression test was administered to both groups, as both a pretest and posttest, to assess the potential effect of the treatment. Data were analyzed using a Two-Way Analysis of Variance (ANOVA) to gauge the potential effect of the instructional modality and gender on the participants' written expression. The findings revealed a statistically significant improvement in written expression among the participants who used blogs compared to those in the control group. However, no significant differences were found between male and female students in either group, suggesting that blog-based instruction is equally effective across gender.

Keywords—electronic blogs, gender, primary education, writing instruction, written expression

I. INTRODUCTION

The world today is living in an era of rapidly advancing technological innovations in Information and Communication Technology (ICT), which have profoundly affected all aspects of life, including education [1–3]. This advancement has culminated in the development of new teaching and learning approaches, allowing both teachers and learners to utilize technological tools that improve the quality of the teaching/learning process [4–6].

E-learning has emerged as one of the most influential trends in enhancing education and its accessibility to users. However, unlike traditional e-learning systems, which provide uniform content for all learners, customized learning systems tailor educational materials and assessments to individual learners, ensuring a personalized learning experience [7, 8]. The Artificial Intelligence (AI) features of e-learning systems can be readily adjusted to align with each user's needs and capabilities, which is particularly useful now as learners can set their own learning goals.

In this context, research [8–10] underscores the need to incorporate personalized instruction into English language education, explaining that customizing instruction to different levels can result in positive learning outcomes. Learners with varying levels of proficiency need personalized learning as different types of instructional

materials can not only engage them but also promote their active participation. Research also underscores the significance of innovative instructional technologies in supporting personalized instruction and underscoring the pressing need to equip teachers with the know-how to effectively integrate these technologies into the language classroom.

E-learning has increasingly incorporated electronic blogs as a dynamic resource for fostering interaction and learner-to-learner information sharing, as they challenge learners to actively engage, express their opinions, and hone their language abilities, ultimately catalyzing their writing performance [1, 2, 5, 6]. In the context of academic and creative writing instruction, blogs are potentially instrumental in building essential skills such as writing proficiency, critical thinking, self-confidence, and expressive abilities [3, 5].

Research suggests that learners gain a lot from writing when given the opportunity to utilize electronic blogs, for blogging potentially promotes consistent writing habits as learners regularly create posts, engage with blog content, and interact with peers' posts. This dynamic activity potentially stimulates both cognitive and creative growth as learners engage in choosing topics of personal interest and creatively sharing their perspectives with others [7, 8, 11]. Consequently, blogs potentially improve learners' ability to creatively articulate their thoughts, which is a crucial aspect in creative writing.

A plethora of research underscores the utility of electronic blogs in teaching and learning. Blogs have been recognized as effective platforms for both synchronous and asynchronous learning sessions, allowing learners to write, publish, and get feedback in real-time or at their convenience [6, 7, 8]. The ensuing flexibility catalyzes engagement with different types of content, exposing learners to, and promoting their appreciation of diverse writing styles and forms of expression [11–13]. Blogs also encourage collaborative learning by providing learners with opportunities to freely express their ideas, review peers' posts, and incorporate different writing styles into their own work [13–15].

Electronic blogs also support autonomy by allowing learners to independently create and modify content, which contributes to the development of unique individual writing styles and personal creativity as learners improve their

vocabulary, critique their work, and build their writing proficiency over time [13, 15]. Through blogging, learners actively hone their ability to articulate and organize ideas coherently and creatively. Moreover, reading and critiquing peers' blog entries potentially enhance their writing proficiency through exposure to diverse textual analyses and writing conventions [6, 15].

Blogs are also platforms for ongoing assessment, which is critical in developing writing skills. Feedback from teachers and peers provides learners with opportunities to refine and reflect on their work. This feedback and the ensuing refinement and reflection enable learners not only to revise and improve their output but also to improve their creative writing abilities [8, 12, 15, 16]. The ability to publish their work encourages learners to think critically, as they become more aware of the implications and effectiveness of their writing.

Extensive research underscores the positive effect of blogs on learners' writing abilities, as blogging enhances motivation, creativity, and writing quality [16–19]. Engaging in discussions and analyzing various texts within blogs further develops creativity and analytical skills [20–25]. Along with other social media, blogs serve as powerful tools for fostering self-reflection and higher-order thinking, enabling learners to synthesize information, articulate ideas, and present them logically. Electronic blogs, in particular, promote both active participation and continuous practice, making it easier for learners to develop these skills [4, 5, 26–28].

Advancements in digital technology have expanded language learning resources beyond the confines of the traditional classroom. As part of this transformation, blogs have captured learners' interest, fostering a more dynamic approach to content consumption while simultaneously improving their communication and written expression [1, 2, 3, 5, 29, 30].

Research suggests that multimedia resources, of which blogs are one, enhance learners' motivation and willingness to engage in language communication across various contexts [14, 16]. Digital tools not only support writing development but also encourage active participation, ultimately improving overall academic performance. Imran *et al.* [2], for example, examined challenges faced by teachers during the transition back to traditional education after the COVID-19 pandemic. Their findings, based on a survey of 107 teachers in central Punjab (Pakistan), revealed that about 90% of the respondents reported greater effort in teaching post-pandemic. Many also noted shifts in their roles, now acting as organizers, counselors, motivators, and managers of learning. This shift underscores the growing role of digitalization in education and the opportunities it offers for enhancing learning effectiveness.

Imran *et al.* [7] emphasized that, while e-learning expands access to uniform content, personalized learning systems go a step further by tailoring both materials and assessment to individual learners to enhance comprehension and overall learning effectiveness. The findings highlighted the need to incorporate adaptive learning models, flexible delivery methods, and emerging technologies (e.g., AI, V/AR) to optimize educational outcomes. Similarly, Aydin [14] claimed that blogs are an invaluable resource in the EFL

classroom, as they potentially foster motivation and communication skills through the provision of a space for self-expression in authentic, life-like contexts.

Research suggests that blogs are a powerful tool for improving writing and promoting active learning [31–37]. For example, Han [16] reported that, despite improvement in both groups, Chinese EFL learners using blogs performed better in writing tasks than those in traditional instruction, as blogs encouraged non-threatening self-expression and allowed peer feedback that fosters skill development. Other research [18, 37–44] suggests that blogging enhances writing, self-esteem, engagement, and motivation. For instance, Hoang Huynh and Truc Hien [18] provided evidence for the contribution of blogs to enhancing writing proficiency and reducing apprehension.

A plethora of research [18, 29–32, 45–50] provided evidence for the utility of blogs, arguing that learners should actively create content rather than passively consume it. For example, Hoang Huynh and Truc Hien [18] further demonstrated that blogs strengthen writing skills, boost interest in writing, and reduce writing anxiety by providing a platform for idea exchange and skill development. Similarly, Mabuan [31], who examined Filipino students' perceptions of the use of blogs as a tool for EFL writing instruction, reported that blogs promote self-expression and boost writing skills. Yanto *et al.* [29] also reported that blogs help learners develop not only vocabulary, reading, and writing skills but also self-esteem, engagement, and motivation to write beyond the classroom. Fithriani *et al.* [30] also reported that blogs help improve EFL writing skills, particularly writing proficiency and active participation in academic discussions. Similarly, Al-Barakat *et al.* [32] found that blogs and e-learning positively affect self-directed learning, writing, and research abilities.

However, despite these benefits, several challenges may hinder the effective use of blogs in writing instruction. The digital divide is a major challenge, as not all learners have equal access to digital technology, which may create disparities in learning opportunities [32]. Furthermore, sustaining learners' motivation and engagement over time can be difficult, especially when blogging is perceived more as an additional academic burden than an interactive learning tool [33]. Privacy concerns and the risk of negative peer feedback also pose challenges, as learners may feel hesitant to publicly share their work [34]. Moreover, teachers often struggle with assessing blog-based writing due to the informal nature of the platform and the need for clear assessment criteria [35]. These factors suggest that while blogging offers valuable opportunities for writing development, teachers must address these challenges to maximize its effectiveness.

While previous research [16, 19], has highlighted advancements in digital learning through various tools, there remains a clear gap in the literature. Existing research has not fully explored how blogs affect diverse learner groups or learning contexts, such as potential variations brought about by gender or academic performance. Thus, further research is needed to develop study designs that better assess the contextual effect of blogs on writing proficiency across learners from different backgrounds, not to mention design strategies to optimize blog use for enhancing writing in

different student populations.

The current research distinguishes itself from prior research in several key aspects. Earlier work has often examined blogs in broad learning environments, whereas the current research specifically examines their role in improving young learners' writing. Furthermore, this research analyzes how blogs affect male and female learners and explores the interaction between instruction and gender, an area that has not been adequately examined before. While previous research has examined multimedia and digital technologies in general, the current research zeroes in on blogs as a tool for writing development. Moreover, whereas previous research has primarily centered on higher education or advanced learning contexts, this addresses primary education—a setting that has been largely overlooked in the literature. By focusing on the effect of blogs on primary school learners' writing proficiency, with an eye on the potential effect of gender, this research fills an important gap. Within this framework, the research seeks to answer the following questions:

- 1) Are there statistically significant differences (at $p \leq 0.05$) in the mean scores of primary school learners' creative written expression, which can be attributed to the instructional modality (blog-based vs. traditional)?
- 2) Are there statistically significant differences (at $p \leq 0.05$) in the mean scores of primary school learners' creative written expression, which can be attributed to gender (male vs. female)?
- 3) Are there statistically significant differences (at $p \leq 0.05$) in the mean scores of primary school learners' creative written expression, which can be attributed to the interaction between the instructional modality and gender?

II. METHOD

A. Study Design and Sample

This study adopted a quasi-experimental design, incorporating an experimental group that received a blog-based intervention and a control group that received conventional instruction, allowing for direct comparison between the two instructional modalities. This design enabled the current researchers to observe how the variables (viz., instructional modality and gender) affected the two groups in the classroom while acknowledging that not all external factors can be fully controlled.

For participant selection, the research team purposefully selected 10 private schools in Amman (Jordan) as the sample of the research. These schools were selected based on several key criteria: having adequate numbers of primary stage classes, demonstrating cooperative administration and teaching staff, and showing willingness to participate in the research. Rather than using random selection (which may not ensure sample representation), purposeful sampling helped guarantee that the selected schools could provide diverse classes that accurately reflected the student population. More importantly, all participating students shared similar socioeconomic backgrounds, language proficiency, and familiarity of technology, helping to reduce the potential effect of these factors on learning outcomes while increasing the reliability of the findings.

The study focused on primary school pupils because this early developmental stage is crucial for language development. Younger learners typically respond more favorably to interactive digital tools, of which blogs are one, than older learners who tend to have different academic skills and expectations.

At the implementation stage, researchers randomly selected five sections from participating schools for the experimental group and five for the control group (each totaling 100 boys and girls). This balanced distribution was essential to enable valid post-intervention comparisons between the two groups.

B. Participant Profile

Given the potential role of gender within the socio-cultural learning environment, it was important to look closely at students' backgrounds. To better predict their engagement levels and learning outcomes, several key factors were evaluated:

- 1) *Learning Duration*. Participants' self-reported daily and weekly study times were tracked to assess how their learning habits related to the intervention.
- 2) *Learning Motivation*. Measuring participants' motivation helped gauge their willingness to engage with blogs and writing tasks, as this significantly affects the success of the intervention.
- 3) *Peer Influence*. The role of peer groups in promoting collaborative learning was observed, recognizing that social support during primary education enhances learning experiences.
- 4) *Technological Access*. Participants needed consistent Internet access and devices (computers, laptops, etc.) to fully participate in blog-based activities.

To develop their writing proficiency, participants were required to blog weekly. They were all encouraged to use blogs as a tool for refining their writing and organizing their thoughts. Teachers supported this process by providing personalized feedback on each learner's posts, and participants themselves were encouraged to comment on one another's work, fostering peer feedback and collaborative learning.

The blogs selected for the intervention were in Arabic, aligning with the language of instruction in Jordanian schools. Platforms, such as *Edublogs* and *Blogger*, were chosen for their user-friendly and engaging interfaces. The blogs aimed to improve writing by helping students express ideas clearly within an interactive, structured format. By using Arabic, the blogs created a relatable learning environment that mirrored learners' everyday language use, making skill development more natural and effective.

C. Materials and Data Collection Tools

1) Educational material based on electronic blogs

The research set clear learning outcomes based on four linguistic topics from the tenth-grade curriculum, designed to enhance written expression in the experimental group. Four lesson plans were created, all utilizing electronic blogs as interactive platforms to transform learners from passive recipients of information to active participants in their own learning. These plans followed a carefully structured progression, as detailed below:

- 1) sparking critical thinking through engaging introductory activities that connected lesson content to learners' everyday experiences;
- 2) presenting (strong and weak) writing examples on the blog for group analysis for collaborative identification of key characteristics of effective writing;
- 3) having students apply these characteristics to their own texts published on the platform for both peer review and teacher assessment; and
- 4) using pre-final grading feedback to guide learners through revisions while showcasing exemplary work to inspire continued growth.

To ensure the validity of the lesson plans, they were reviewed by a jury of specialists in language education, curriculum and Instruction, educational psychology, and assessment whose feedback was used to make refinements before implementation. A pilot run with a small group of learners, later excluded from the main sample, helped identify practical improvements, such as adjusting activity durations and streamlining blog navigation, ultimately strengthening the reliability and effectiveness of the plans.

Meanwhile, the control group received conventional instruction according to the guidelines of the prescribed teacher's book. The teachers led all classroom activities through explanations, assignments, and assessment, and learners were offered limited opportunities to exchange ideas or actively develop writing proficiency, limiting their role to passive listening rather than active participation in their own learning.

2) Research instrument (written expression test)

A written expression test, focusing on content and expository writing, was developed. The test comprised four open-ended questions designed for learners to freely use their writing and expressive skills, emphasizing *idea organization*, *clarity*, and *critical evaluation of writing style*.

To establish validity and reliability, the test was reviewed by a jury of experts in language education, curriculum and Instruction, educational psychology, and assessment to confirm alignment with the learners' academic levels and targeted skills. The questions were refined in light of the jury's feedback. A pilot test was also conducted with 20 students outside the main sample to check suitability and timing. Participants took about one hour to complete the test, which was considered adequate for detailed responses.

To assess the quality of the writing, specific rubrics were developed, focusing on key aspects of writing, including the following:

- 1) *Idea Clarity*. How clearly ideas were presented,
- 2) *Logical Sequence*. Coherence and organization of ideas,
- 3) *Language Accuracy*. Proper grammar, spelling, punctuation, and sentence structure, and
- 4) *Creative Expression*. Originality and creativity in writing.

To ensure objective grading, four evaluators individually scored the pre- and post-tests, using the rubrics. Their scores were averaged to minimize bias and maintain consistency. Inter-rater reliability was confirmed using Holsti's formula, showing 93–98% agreement between evaluators. Temporal reliability was also assessed using Pearson's correlation coefficient (applied to a pilot sample retested after two weeks), yielding 96% consistency.

Table 1 presents the pre-test means and standard

deviations for the participants' written expression, categorized by gender and group (control vs. experimental). The data comprised the number of participants (n), mean scores (\bar{x}), and Standard Deviations (SD) for each subgroup in addition to the overall means across participants.

Table 1. Pre-test scores: Means and standard deviations by gender and group

Gender	Group	n	\bar{x}	SD
Male	Control	41	12.07	5.13
	Experimental	37	11.99	4.65
Female	Control	59	13.37	4.17
	Experimental	63	13.23	5.63
Total	Control	100	12.12	4.96
	Experimental	100	11.97	5.07

Table 1 presents the pre-test writing scores by gender and group, showing female students to consistently outperform their male counterparts (13.37 vs. 12.07 for the control and 13.23 vs. 11.99 for the experimental) with comparable standard deviations (4.17–5.63). Both groups demonstrated similar baseline performance, indicating equivalent starting conditions while revealing gender-based differences in writing performance.

Table 2 presents the results of a two-way Analysis of Variance (ANOVA) comparing pre-test scores by instructional modality and gender, examining both main effects and interaction.

Table 2. Two-way ANOVA of pre-test writing scores by instructional modality and gender

Source	Sum of Squares	df.	Mean Square	F-value	Sig.
Instructional Modality	15.454	1	15.454	0.123	0.698
Gender	6.664	1	6.664	0.045	0.675
Interaction	6.337	1	6.337	0.036	0.631
Error	12541.312	196	103.464		
Total	345683.000	200			

The two-way ANOVA results in Table 2 above demonstrate that neither instructional modality ($p = 0.698$) and gender ($p = 0.675$) nor the interaction between them ($p = 0.631$) had statistically significant effects on pre-test scores, as all p-values substantially exceed the $\alpha = 0.05$ threshold. The consistently small F-values (all < 0.2) and large error term (MS = 103.464) relative to treatment effects confirm that any observed group differences in Table 1 represent random rather than systematic differences, thereby validating the baseline equivalence of the groups prior to the treatment.

III. RESULTS OF THE STUDY

To achieve the objectives of the research, the effect of electronic blogs on developing writing expression was determined, as related to instructional modality, gender, and the interaction between the two. Towards this end, means and standard deviations of the post-test scores were calculated, as shown in Table 3.

Table 3. Means and standard deviations of post-test scores by instructional modality and gender

Group	Gender	n	\bar{x}	SD
Control	Male	41	25.08	9.84
	Female	37	24.94	10.94
Experimental	Male	59	37.82	4.19
	Female	63	37.92	3.93

Table 3 shows observed differences in the post-test mean scores and standard deviations between the control and experimental groups across gender. Although the overall performance of the experimental group (taught using electronic blogs) was higher than that of the control group (taught through conventional instruction), this is not the only difference between the two groups, as slight differences within the male and female participants in each group are also noted. More specifically, the means were 25.08 and 37.82 for the male participants and 24.94 and 37.92 for the female participants in the control and experimental groups, respectively.

However, these differences across gender were deemed not significant, suggesting that the greater effect in this research may be attributable to instructional modality rather than gender. To determine the significance, or lack thereof, of these differences between the mean scores of the two groups, a two-way Analysis of Variance (ANOVA) was used, as shown in Table 4.

Table 4. Two-way ANOVA of the effect of instructional modality, gender, and their interaction on the participants' post-test scores

Source	Sum of Squares	df.	Mean Square	F-value	Sig.	η^2
Instructional Modality	73247.02	1	73247.02	4.817	0.000	0.14
Gender	101.938	1	101.938	1.027	0.837	0.00019
Method \times Gender	0.161	1	0.161	0.602	0.794	0.00000031
Error	11423.053	196	816.353			
Total	523193.000	200				

Table 4 reveals a statistically significant main effect of instructional modality on post-test scores ($F(1,196) = 4.817$, $p < 0.001$, $\eta^2 = 0.14$), with a high effect size, indicating a notable effect on improving the participants' written expression. Conversely, neither gender ($F(1,196) = 1.027$, $p = 0.837$, $\eta^2 \approx 0.0002$) nor the interaction between instructional modality and gender ($F(1,196) = 0.602$, $p = 0.794$, $\eta^2 \approx 0.0000003$) showed significance, indicating that gender neither affected participants' scores nor modulated the efficacy of the treatment. The large error variance ($SS = 11,423.053$) relative to total variability highlights unaccounted-for factors, yet the robust modality effect supports the generalizability of the treatment across gender.

In terms of the questions of the research, to answer the first question, which addressed the potential effect of instructional modality, differences were detected in the mean scores of written expression between the control group, taught conventionally, and the experimental group, taught through electronic blogs, as the latter outperformed the former in writing expression. These findings revealed statistically significant differences in written expression between the two groups, suggesting that using electronic blogs positively affects written expression.

To answer the second research question, which addressed the potential effect of gender, differences were detected in the mean scores of written expression between the control and experimental groups, but these differences were not statistically significant with a rather small effect size ($\eta^2 = 0.00019$), suggesting that gender has a negligible effect on participants' written expression scores on the post-test. In other words, no statistically significant difference in male and

female participants' written expression were found regardless of the instructional modality used.

The third research question, which addressed the potential effect of the interaction between instructional modality and gender, no statistically significant differences were detected in the mean scores of written expression between the control and experimental groups. The F-value for the interaction was 0.602 with a statistical significance of 0.794, meaning that the effect of the instructional modality on writing expression was consistent across gender.

Moreover, the effect size for the interaction between instructional modality and gender is very small ($\eta^2 = 0.00000031$), indicating no significant interaction between the instructional modality and gender in affecting the participants' written expression. This further suggests that the effect of instructional modality (electronic blogs vs. conventional instruction) on written expression is consistent across gender, with no notable differences brought about by it. Therefore, it can be concluded that electronic blogs were effective in improving written expression for all participants, irrespective of gender.

These findings have significant implications, first and foremost amongst which is that instructional modality is the biggest determinant of improvement in writing expression, since electronic blogs proved more effective than conventional instruction. Second, gender had a marginal effect on performance, as electronic blogs proved equally effective with both male and female participants. Finally, no effect was detected for the interaction between gender and instructional modality, suggesting that electronic blogs may prove effective for all learners irrespective of gender.

IV. DISCUSSION OF THE RESULTS

The results showed that electronic blogs helped participants improve their written expression more effectively than traditional instruction. Participants who learned through blogs scored significantly higher on the post-test than their peers who experienced conventional instruction.

The effect size for the use of electronic blogs was high, meaning that their effect on learners' written expression is higher than that of conventional instruction of which the effect size was rather minimal. This shows that electronic blogs did not only boost learners' written expression but also redefined effectiveness in writing instruction, setting higher standards for how instruction can catalyze performance.

Electronic blogs demonstrate significant potential in supporting writing instruction, as they potentially keep learners constantly engaged with writing while offering real-time feedback—both of which are key for language development. The participants did not just write more; they engaged in more creative thinking, self-expression, and reflection. Moreover, having learning materials always at their fingertips potentially encouraged them to take control of their learning, both in and out of the classroom. These features collectively enable electronic blogs to surpass the effectiveness of conventional instructional approaches.

The gender-neutral effectiveness of electronic blogs was a key finding, as the effect size for gender differences in writing performance was fairly negligible. Both male and female students exhibited comparable improvements,

suggesting that electronic blogs potentially deliver equitable learning outcomes. Furthermore, the analysis revealed minimal interaction between instructional modality (electronic blogs-based vs. conventional instruction) and gender, suggesting that blogs potentially mitigate biases linked to socialization or gender roles in classroom dynamics. This positions electronic blogs as an inclusive pedagogical tool, potentially democratizing access to skill development.

These findings align with those of prior research which emphasize the positive effect of technology on writing skill development. Aydin [14] and Han [16], for instance, observed that blog-based instruction not only improved writing quality but also heightened learner motivation. Aydin [14] emphasized the contribution of blogs in sustaining authentic, real-time language practice, a cornerstone of skill acquisition, while Han [16] noted superior performance among blog users compared to peers in traditional instructional settings.

Furthermore, teachers corroborate the advantages brought about by blog-based instruction, noting that blogs promote autonomous, reflective learning and encourage learners to write more. For example, Fageeh [3] asserts that digital tools, such as blogs, reduce institutional barriers, including gender-based disparities, by offering flexible, interactive platforms accessible to all learners.

The statistical analysis corroborates this inclusivity, as no statistically significant gender-based disparities emerged in the participants' written expression, with both male and female learners benefiting equally from blog-based instruction. The two-way ANOVA further confirmed negligible interaction between instructional modality and gender, suggesting that blogs neutralize sociocultural influences that often skew classroom participation. This aligns with previous research findings, as scholars, such as Bashir *et al.* [1], posit that digital tools foster active, student-centered learning. Blogs, in particular, potentially circumvent social or cultural constraints by enabling autonomous access to materials, thereby promoting equitable participation.

Blogs cultivate a relatively more relaxed, low-pressure learning environment conducive to risk-taking and self-expression. Learners who normally hesitate to participate in the conventional classroom often thrive in this informal medium, experimenting with creativity and ownership, which is in direct contrast to the rigidity of traditional instruction where reliance on teachers' direct help is the norm.

In a post-pandemic educational landscape, the integration of blogs into language instruction further aligns with broader trends toward technology-enhanced pedagogy. As Imran *et al.* [2, 6] argue, these tools lay the groundwork for adaptive, personalized learning systems that prioritize inclusivity and learner agency, which are all critical principles to modern education.

V. CONCLUSION AND IMPLICATIONS

This research underscores the value of digital media, particularly blogs, in enhancing writing skills. Participants who learned through blogs outperformed their conventionally-instructed peers. The interactive and dynamic nature of blogs potentially encourages creativity, sustained

engagement, and regular feedback throughout the writing process.

However, despite its marked contribution to the ongoing discourse on the utility of digital media in language education, the current research is not without limitations. The relatively small sample size limits the generalizability of the findings. In addition, social and cultural factors could have affected how students interacted with blogs, pointing to directions for further research.

Future research should broaden the scope of this study by including larger, diverse participant groups from various educational contexts. Further research could also examine how learners' interactions with online content, such as feedback exchanges, shape their literacy development. Investigating social and cultural impacts on digital tool usage remains critical, as this understanding could help educators better tailor instruction to meet learners' needs. Exploring these avenues would help foster technology-supported educational environments that can inspire students and deepen their writing in more meaningful ways.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

A.A.A. and R.M.A.-B. conceptualized the manuscript's focus, proposed the aims, prepared the draft manuscript, and wrote all the sections. O.M.A., R.F.B., K.M.A. and Y.Z.A. collected, analyzed, and interpreted the data. A.A.A. and R.M.A.-B. were major contributors to writing the manuscript. All authors read and approved the final version of the manuscript.

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