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Revolutionizing Writing Learning: How Electronic Blogs Contribute to Enhancing Writing Expression Skills in Primary School Pupils

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Abstract. This research examined the effectiveness of electronic blogs in enhancing writing expression skills among pupils in primary schools. A sample of 180 pupils was purposefully selected from eight public schools located in Amman, Jordan. Participants were allocated into two groups: a control group that was taught through conventional methods and an experimental group that was taught using electronic blogs. Writing assessments were carried out prior to the lessons, measuring baseline expression skill, and after the intervention, measuring improvement. A two-way ANOVA test for intragroup comparison of writing performance regarding teaching method and gender was

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conducted. Findings showed that compared to the control group, the writing skills of the experimental group were enhanced at statistically significant levels and that blog-based instructions were effective regardless of gender. In view of the results, it was recommended that electronic blogs should be used within educational frameworks in which gender-balanced education is required. In addition, future studies should analyze the relationship between the pupils' contact with digital resources and the development of their writing skills. It was also recommended that the availability of technology tools in all public and private schools be expanded to increase the possibility of employing technological tools in the educational process.

Keywords: electronic blogs; pupils' performance; technology tools; language skills; writing expression

1. Introduction

The world is undergoing some crucial technological changes, especially in Information and Communication Technology (ICT), and people's daily routines, including education, have changed due to the integration of technology (Bani Irshid et al., 2023; Bataineh et al., 2013; Hawamdeh et al., 2025). The use of technology in teaching has led to the invention of new teaching methods and approaches that educators and pupils can use to improve the quality and effectiveness of education and the provision of active and interactive environments that foster engagement and understanding (Bataineh & Bani Amer, 2023; Fageeh, 2011; Said et al., 2013).

Electronic blogs stand out as major tools within e-learning environments. These portals allow more creative, interactive, and collaborative platforms for pupils and educators to communicate; to share ideas, opinions, and thoughts; to reflect on their experiences; and to engage in discussion with colleagues. Researchers Arndt and Woore (2018), Khasawneh et al. (2022), and Ozkan (2011) reported that blogging has numerous advantages for pupils such as enhancing their writing and oral communication skills, developing critical and creative skills, and responding to different prompts and feedback. The use of blogs in education can change the conventional ways of teaching in classrooms and make learning more customizable and friendly for learners (Al-Halalat et al., 2024; Bataineh & Bataineh, 2024).

Pupils need creative writing skills since modern expression is increasingly gaining acceptance (Al-Barakat, Al-Hassan, AlAli et al., 2025; Arndt & Woore, 2018). Electronic blogging develops pupils' writing skills through maintaining consistent writing practice, reading and creating blog content, and interacting freely and innovatively with the published posts of their interests (Al-Barakat & AlAli, 2024; Alsamadani, 2018; Tosuncuoglu, 2018). Therefore, enabling pupils to publish content such as text, images, audio and video files over the internet, and electronic blogs (also called weblogs) allows pupils to develop their skills of critical thinking and creative writing while sharing their ideas and interacting with these blogs.

Many researchers argue that pupils should not simply be passive consumers of information (Al-Barakat, Al-Hassan, Alakashee et al., 2025; Aravind & Rajasekaran, 2021; Huynh & Hien, 2024; Mangen & Pirhonen, 2022) and that blogs fulfill the educational, motivational, and cognitive needs of pupils. According to Al-Barakat and Al-Hassan (2009) and Alsamadani (2018), by allowing pupils to prepare their posts, link them to other websites, comment on them, and arrange them in a certain order, electronic blogs remarkably stimulate pupils' creativity by evoking interaction with various contents and styles and diversifying their ways of expressing themselves. Furthermore, the social aspect of blogging helps the sharing of ideas and even styles of writing, which contributes to building advanced skills in creative writing (Alqahtani & Altalhab, 2020; Alsamadani, 2018; Bataineh & Alqatnani, 2019; Khasawneh et al., 2023; Vicol et al., 2024).

By aiding pupils in organizing their thoughts, blogs contribute to active learning (Aburezeq, 2020; AlAli et al., 2025; Bataineh et al., 2020; Tosuncuoglu, 2018), serving as valuable research tools by allowing pupils to examine strategies of different authors, learn new ways of description, and use such works as inspiration (Kuo et al., 2017; Obeiah & Bataineh, 2016; Yan et al., 2020). Through the feedback system on blogs, pupils receive constructive comments from their teachers and peers, helping them to enhance their work (Al-Barakat et al., 2022; Al-Hassan et al., 2025; Alqahtani & Altalhab, 2020). In addition, blogs assist pupils in acquiring the technological skills that are needed to meet the demands of writing in the contemporary digital world (AlAli & Al-Barakat, 2024a; Al-Barakat & Bataineh, 2011; Nasir et al., 2021; Rini & Cahyanto, 2020; Santosa et al., 2019; Zedelius et al., 2019).

In conclusion, electronic blogs as educational tools can improve pupils' writing skills. They help pupils to enhance their creativity, writing style, and idea organization (Al-Barakat & Al-Hassan, 2009; Huynh & Hien, 2024). Through blogs, pupils' creativity is enhanced because blogs allow them to express their thoughts in a more personal way (Potts et al., 2019). In addition, blogs enable pupils to receive peer and teacher feedback that aids in polishing and refining their work. Interacting with other texts and analyzing ideas encourages pupils' analytical and imaginative capabilities (Potts et al., 2019). This, in turn, fosters creative writing, as pupils are taught how to use modern tools and technology to stimulate and nurture their ideas (AlAli & Al-Barakat, 2024b; Bataineh & Mayyas, 2017; Fraihat et al., 2022; Nguyen & Dat, 2020; Potts & Shanks, 2014).

The role of blogs in enhancing pupils' writing skills has been the focus of several educational studies. Mabuan (2018) investigated pupils' perceptions of blogging as an English language writing enhancement tool; the results showed that pupils were more comfortable and expressive in their writing when they used blogs, indicating the positive impact of blogs on their writing skills. Moreover, Yanto et al. (2021) reported that blogging improved not only writing and reading among learners but also self-esteem and the motivation to write. It was also reported that learners' vocabulary and interest in reading increased through blogging.

Fithriani et al. (2019) highlighted the usefulness of blogs in the enhancement of writing skills, especially in English as a Foreign Language (EFL). He also suggested that blogs foster pupils' participation and improve their writing skills. Similarly, Huynh and Hien (2024) examined the impact of blogs on the English writing skills of pupils; the findings of their research indicated that blogs enhanced pupils' writing skills, motivated them to write more, and lowered their anxiety about writing. The most significant advantage of blogs is their ability to facilitate the communication and development of ideas and skills.

Khasawneh et al. (2022) and Yan et al. (2020) argue that e-learning improves pupils' writing and research skills; however, there are still challenges such as lack of access to technology and the internet. Al-Barakat et al. (2022) and Al-Hassan et al. (2012) argue that blogs are an important tool for enhancing productive writing and improving overall writing skills.

Because previous studies mainly focused on the impact of blogs on writing skills in general, the researchers of the current study believe that expression in writing is one of the most neglected areas of focus. Therefore, this research aimed to highlight this neglected aspect by providing unique insights into how blogs can aid in the enhancement of writing expression among primary school children, as it requires the pupil to express their ideas vividly and logically.

Despite blogs being recognized as useful tools in promoting writing, there is still a considerable gap within the literature. Previous studies often do not take into consideration how the effectiveness of blogs differs depending on the learner's context, the pupil population, and the level of achievement. For instance, there is a lack of consideration for how the effectiveness of learning through blogs differs due to gender or different levels of academic attainment. In addition, while many studies have focused on the motivational aspects of blogs, there is little research that is aimed at how blogs may be tailored to different educational levels and children's requirements.

There is also a lack of research concerning the contextual impact of blogs on the writing skills of primary school pupils', resulting in contextual gaps within the literature. Together with the lack of context, there is a need for research that focuses on enhancing the implementation of blogs in different educational contexts. This research seeks to fill this gap by investigating how the writing expression skills of primary school pupils can be enhanced through the appropriate selection of teaching methods and consideration of pupil gender.

The research aimed to evaluate the effectiveness of electronic blogs as pedagogical instruments in the writing expression skills of pupils in the lower primary grades. It also aimed to investigate the impact of gender, teaching method, and interaction between gender and the teaching method on the levels of writing expression skills. The following hypotheses were tested:

1. There are statistically significant differences ($p \leq 0.05$) in the mean scores of writing expression skills among primary school pupils attributed to the teaching method (blogs-based learning vs conventional).

2. There are statistically significant differences ($p \leq 0.05$) in the mean scores of writing expression skills among primary school pupils attributed to gender (male vs female).
3. There are statistically significant differences ($p \leq 0.05$) in the mean scores of writing expression skills among primary school pupils attributed to the interaction between teaching method and gender.

2. Method

2.1 Research Design and Sample

This research used a quasi-experimental design that involves monitoring the impact of certain factors on research groups within their natural environment. In this research, participants were assigned to two groups: an experimental group that received the intervention and a control group that remained unchanged, and comparisons were made between the two groups. Both the purpose and the nature of this research are responsible for using the quasi-experimental design approach because this research was conducted in real educational settings in which random assignment of participants was not possible.

Eight public primary schools located in Amman, Jordan were purposively selected as a research sample. The selection of these schools was due to the existence of adequate primary school classes and the positive cooperation extended by the school principals and teachers, which helped ease the research implementation processes. From these schools, eight classes were randomly selected, of which four classes represented the experimental group of 90 pupils and four classes represented the control group. Each group consisted of an equal number of pupils to maintain balanced proportionality.

Throughout the research, factors that could affect the dependent variables were considered. For instance, pupils' understanding of blogs was investigated and reservations were made, ensuring that the pupils knew how to operate blogs as an educational tool. Pupils' accessibility to technology was considered because the level of technology that was employed may have differed due to the presence of technological devices in the pupils' surroundings. The possession of technological devices in the schools was also examined, as this was likely to differ between urban and rural schools. Lastly, the ICT infrastructure was described and taken into consideration.

2.2 Electronic Blogs

Learning activities were created to align with pupils' daily realities in a manner that pivoted their attention towards understanding educational content and motivated them to participate. Each lesson started with some type of introductory activity that was meant to connect the research topics with the pupils' real lives. For instance, there were some inquiry-based questions that related to pupils' experiences or current social issues within the relevant subject matter to be taught. These activities helped not only foster critical thinking among the pupils but also made every lesson relevant to their lives, which increased their motivation for active engagement. Furthermore, pupils were

motivated to devise ways in which the concepts being taught could be relevant to their lives.

For group critique, electronic blogs with high- and low-quality written samples were presented to the pupils. This type of exercise was aimed at facilitating analytical skills among pupils, enabling them to evaluate the strengths and weaknesses of various texts and to understand the characteristics that contribute to considering writing effective or ineffective. Accordingly, pupils were able to formulate criteria for effective writing and to apply these criteria to their own compositions, which resulted in enhancing their level of self-criticism.

Later, the pupils were asked to post texts of their own on electronic blogs. This task was aimed at developing the pupils' writing ability, as there was interaction between them, their colleagues, and the teachers through constructive criticism. This allowed the pupils to incorporate changes based on the criticism, thus enabling them continually to improve their work. The last phase of the intervention included allocating time for editing and proofreading the texts and considering the peer and teacher feedback. A showcase page for displaying exemplary works was allocated in the blog, which encouraged pupils to improve their writing and be more creative.

The combination of different introductory activities that connect lessons to the pupils' life served to improve the pupils' ability to think critically, while the implementation of the criteria taught improved the pupils' writing skills. Through these activities, there was also a change in the degree of interaction between the pupils and the teacher, which benefited the overall learning experience and the pupils' ability to use modern educational materials such as electronic blogs to enhance their skills.

To ensure the validity of the learning activities, they were reviewed by a group of experts in language teaching and learning and some adjustments were made based on their comments. The plans were tested on a few pupils from outside the main sample group to determine and address practical issues concerning timing of the activities and splitting blog tasks into simpler parts, thereby improving the effectiveness of the plans. In the control group, conventional teaching was applied with the teacher delivering the instruction and focusing on explaining and evaluating skills with little engagement in pupil interactions or in writing during active practice.

2.3 Writing Expression Skills Test

The test titled Writing Expression Skills Test was created for pupils in primary grade. It focused on content and expository writing and comprised four open-ended questions meant to motivate pupils to express and organize ideas freely, to state them clearly, and to evaluate their writing style critically.

The test was also reviewed by a group of experts in language pedagogy, curricula, educational psychology, and assessment. Their feedback helped align the test with the pupils' academic levels and targeted writing skills. In addition,

a pilot test was conducted with 23 pupils outside the research's main sample to evaluate the suitability of the test and the time expectations. The participants reported that completing the test within one hour was sufficient for detailed responses, which was approximately the time required. In addition, objectivity in scoring was maintained as four independent evaluators graded the pre- and post-test separately using the set criteria, which included clarity of ideas, logical flow, correctness of language, and creativity. The scores were averaged across all evaluators to minimize discrepancies.

Inter-rater reliability was determined using Holsti's formula. This showed an agreement range of 93%–98%, indicating strong consistency and agreement among the raters (AlAli & Al-Barakat, 2022). It involved two raters who provided balanced opinions to maintain accuracy and diversity of perspectives.

Moreover, the pilot study was retested two weeks after the first test, and Pearson's correlation coefficient was computed, indicating a value of 0.94. This temporal consistency was a strong indicator of reliability. Such reliability significantly boosts the credibility of the research, demonstrating that the method is reliable through time.

2.4 Data Collection and Analysis

To ensure group equivalence and results reliability, the instructors for the male and female classes (experimental group) received 18 hours of accredited training on using blogs for instructional purposes. A pre-test measuring basic writing expression skills was also administered to all 180 participants to establish baseline equivalence. Data were later collected through a post-test measuring pupils' writing expression skills.

Using the most recent version of SPSS 28, a two-way ANOVA was performed for checking the intervention's impact on writing expression skills and checking for interactions between the control and experimental groups while considering gender and teaching methods. The test was selected because it offered the possibility of studying several issues at once, which increased the precision and credibility of the findings regarding the impact of the intervention on various subgroups such as male and female participants and control and experimental participants. It also included interactions between different factors, which other methods may have failed to do effectively.

3. Results of the Research

3.1 Pre-Test Results

A pre-test was administered to all 180 participants to assess baseline writing expression skills. Table 1 shows the results.

Table 1: Pre-test means and standard deviations by gender and group

Gender	Group	N	Mean	SD
Male	Control	37	12.07	4.18
Male	Experimental	32	11.99	4.12

Gender	Group	N	Mean	SD
Female	Control	53	13.37	3.99
Female	Experimental	58	13.23	4.03
Total	Control	90	10.98	3.56
Total	Experimental	90	10.87	4.09

Table 1 shows slight differences in the arithmetic means of each gender in the two groups. For example, among males, the control group had a slightly higher mean than the experimental group. A slightly higher mean was also demonstrated among the females in the control group, although the margins were very small. To check if there were significant differences attributed to the teaching method with regard to gender, a two-way ANOVA was performed, and the results are illustrated in Table 2.

Table 2: Two-way ANOVA results for pre-test scores

Source	Sum of Squares	df	Mean Square	F-value	Sig.
Teaching Method	14.467	1	14.467	0.142	0.567
Gender	5.379	1	5.379	0.056	0.734
Interaction	4.997	1	4.997	0.056	0.723
Error	12341.513	176	124.825		
Total	455672.034	180			

Table 2 shows an absence of a statistically significant effect of the teaching method on the pre-test scores ($p = 0.567$) and gender ($p = 0.734$) and on the interaction of both teaching method and gender ($p = 0.723$).

3.2 Post-Test Results

A post-test was administered to all participants, and Table 3 presents the results.

Table 3: Arithmetic means and standard deviations of participants' scores in the post-test by gender and group

Group	Gender	N	Mean	SD
Control	Male	37	26.03	8.62
	Female	53	25.74	7.67
Experimental	Male	32	36.80	3.05
	Female	58	36.87	2.99

The results in Table 3 shows differences in the arithmetic means between the control and experimental groups for both genders, with the experimental group achieving better results. The results also showed slight differences between the male and female pupils within the two groups. To check if there were significant differences attributed to the teaching method with regard to gender, a two-way ANOVA was performed. The results are illustrated in Table 4.

Table 4: Two-way ANOVA results for post-test scores

Source	Sum of Squares	<i>df</i>	Mean Square	<i>F</i> -value	<i>p</i> -value	η^2 (Effect Size)
Teaching Method	731.679	1	731.679	3.457	0.0440	0.25
Gender	100.938	1	100.938	0.998	0.607	0.00002
Interaction	0.152	1	0.152	0.798	0.667	0.000044
Error	16628.724	176	9034.213			
Total	604721.063	180				

3.2.1 Writing Expression Skills and Teaching Method

The results in Table 4 show that pupils in the experimental group performed significantly better in writing expression skills than those in the control group ($p = 0.0440$). In addition, the results indicated that the effect size of the teaching method was considerable ($\eta^2 = 0.25$). These results confirm that electronic blogs significantly contribute to enhancing writing expression skills.

3.2.2 Writing Expression Skills and Gender

The results in Table 4 show that differences in the arithmetic means related to gender were not statistically significant ($p = 0.607$), and effect size was negligible ($\eta^2 = 0.00002$), which means that gender did not significantly improve the writing expression skill level. In other words, the use of electronic blogs demonstrated similar results on the performance of pupils by both genders.

3.2.3 Writing Expression Skills, Teaching Method, and Gender

Regarding the interaction between teaching method and gender, the results in Table 4 show an absence of statistically significant differences in the arithmetic means based on the interaction between teaching method and gender ($p = 0.667$), and the effect size was too small ($\eta^2 = 0.000044$). This indicates that the interaction impact of the teaching method on writing expression skills was similar for both male and female pupils.

4. Discussion

The findings of the research show that the implementation of electronic blogs as a pedagogical tool improved pupils' writing expression skills to a greater extent than the conventional method of learning, as validated by the statistical results. Accordingly, the findings underscore modern teaching techniques over conventional methods.

Furthermore, implementation of electronic blogs in education helped in fostering pupils' participation in the learning process and developing cognitive writing skills through facilitating interaction with colleagues and teachers, benefiting from feedback and self-criticism, and seeking better written expressions. This made learning more engaging and constructive. In conclusion, the ease of use and the availability of electronic blogs may also encourage pupils

to work on their writing skills in less formal environments beyond classroom settings.

These findings are consistent with the studies of Kuo et al. (2017) and Yan et al. (2020), which reported that pupils using electronic blogs performed better in writing than those using conventional methods. They are also consistent with the studies of Assimonye and Ibe (2019), Strawhacker et al. (2018), and Wang (2019), which reported that the interactive nature of electronic blogs enables pupils to write frequently, work autonomously in a positive and constructive manner, share ideas, and learn from their peers, thereby enhancing their writing skills.

Requiring minimal supervision from instructors, electronic blogs have various forms of activities that give learners a less formal environment, which is suitable for pupils who are shy or are fearful of participating in a normal classroom setting. Furthermore, blogs allow pupils to write in a freer-flowing manner, which helps them to refine their writing skills. Unlike conventional classrooms that follow a strict lesson plan, pupils in a modern classroom are less likely to face restrictions on their creativity.

This research highlights the conclusions of prior studies and confirms the effectiveness of electronic blogs in aiding pupils to enhance their writing skills. It also confirms that electronic blogs are not only a transformative tool for teaching but they also provide additional space and resources that spark creativity and imagination. Thus, electronic blogs are essential tools in effectively enhancing expression of writing skills in varying educational settings.

The findings did not show significant differences between male and female pupils in terms of acquiring writing expression skills. This indicates that electronic blogs serve both genders equally well. This highlights the fact that electronic blog systems afford learners autonomy over the materials and texts with which they interact, thereby eliminating some gender-related obstacles to the learning process. However, this finding is not consistent with the study of Al-Barakat et al. (2023), which reported that females tend to outperform males in writing. Regarding the impact of the interaction between teaching method and gender, the results show that regardless of gender, neither the conventional nor the electronic blog method was helpful in improving writing performance.

Accordingly, it can be defended that electronic blogs aid in the construction of more equitable learning environments for both genders. This supports the use of technology in education because regardless of pupils' gender, they all have the same chance to enhance their writing skills. This finding is consistent with Fageeh (2011) who reported that gender inequalities embedded within educational frameworks are likely to be alleviated with technological adoption in the classroom.

5. Conclusion and Implications

This research analyzed the effects of electronic blogs as pedagogical tools and identified their potential for fostering writing expression skills. The results

confirm that electronic blogs are effective not only in aiding pupils' writing skills but also in fostering a gender-inclusive learning space. It is noteworthy that both male and female pupils equally achieved improvements in their writing skills using electronic blogs, which underscores the importance of these blogs as educational aids within the framework of gender-balanced education.

Despite the above contributions, this work has some limitations. The primary concern of this research is the generalizability of the results, which may have been influenced by the limited sample size and the resources that were available. Moreover, contemporary societies and the culture's contexts within which the pupils use blogs may determine the level of interest and learning that the pupils achieve. For example, changes in cultural attitudes towards technology or writing may determine the level of pupil interest in blogs and, therefore, justify further investigation into these elements within learning environments. In addition, the duration of the research and the limited resources that were available may have reduced the impact of electronic blogs on writing skill improvement, at least in the short term.

To address these conclusions, future studies should look at other educational levels and incorporate electronic blogs as one of the tools to analyze larger sample sizes. Moreover, further studies should analyze the relationship between the pupils' contact with digital resources and the development of their writing skills. It would be beneficial to include the pupils' and the teachers' qualitative opinions concerning the use of blogs as a teaching tool to evaluate their impact more meaningfully. Such research would contribute towards knowledge on the relevance of electronic blogs in different educational settings, which would foster the creation of more responsive pedagogical approaches.

In conclusion, this research demonstrated that the use of electronic blogs can flexibly improve pupils' writing skills and simultaneously promote equal participation in the classroom. Additional work is needed to investigate the full potential of blogs in education and to devise methods for their use in pedagogical frameworks.

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7. References

- Aburezeq, I. (2020). The impact of blogs on the development of written composition skills. *Al Ain University (AAU) Journal of Business and Law*, 4(2).
<https://doi.org/10.51958/AAUJBL2020V4I2P3>
- AlAli, R., & Al-Barakat, A. (2022). Using structural equation modeling to assess a model for measuring creative teaching perceptions and practices in higher education. *Education Sciences*, 12(10), 690. <https://doi.org/10.3390/educsci12100690>
- AlAli, R., Al-Barakat, A., Bataineh, R., & Alqatawna, M. (2025). From pixels to prose: Teachers' views on the power of digital imagery in early language development.

- Forum for Linguistic Studies*, 7(2), 160–173. <https://doi.org/10.30564/fls.v7i2.8186>
- AlAli, R. M., & Al-Barakat, A. A. (2024a). Artificial intelligence experts' perceptions on the effective use of artificial intelligence applications in university learning environments. *Journal of Ecohumanism*, 3(4), 1780–1793. <https://ecohumanism.co.uk/joe/ecohumanism/article/view/3710>
- AlAli, R. M., & Al-Barakat, A. A. (2024b). Leveraging geography teachers' pedagogical skills to enhance secondary students' understanding of tourism concepts. *Geojournal of Tourism and Geosites*, 57, 1885–1892. <https://gtg.webhost.uoradea.ro/PDF/GTG-4spl-2024/GTG-4spl-2024.pdf>
- Al-Barakat, A. A., Al-Hassan, O. M., AlAli, R. M., Al-Hassan, M. A. M., & Al Sharief, R. A. (2023). Role of female teachers of childhood education in directing children towards effective use of smart devices. *Education and Information Technologies*, 28(6), 7065–7087. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9707229/>
- Al-Barakat, A. A., Al-Hassan, O. M., AlAli, R. M., Bataineh, R., Aboud, Y., & Ibrahim, N. A. (2025). Shaping young minds: How teachers foster social interaction, psychological security, and motivational support in the primary language classroom. *International Journal of Learning, Teaching and Educational Research*, 24(1), 359–378. <https://doi.org/10.26803/ijlter.24.1.18>
- Al-Barakat, A., & AlAli, R. (2024). The impact of pictures-based activities in enhancing reading comprehension skills among young children. *XLinguae*, 17(4), 176–194. <https://doi.org/10.18355/XL.2024.17.04.11>
- Al-Barakat, A., & Al-Hassan, O. (2009). Peer assessment as a learning tool for enhancing student teachers' preparation. *Asia-Pacific Journal of Teacher Education*, 37(4), 399–413. <https://doi.org/10.1080/13598660903247676>
- Al-Barakat, A. A., AlAli, R. M., Al-Hassan, M. M., & Al-Hassan, O. M. (2022). Supervisory performance of cooperative teachers in improving the professional preparation of student teachers. *International Journal of Learning, Teaching and Educational Research*, 21(8), 425–445. <https://doi.org/10.26803/ijlter.21.8.24>
- Al-Barakat, A. A., Al-Hassan, O. M., Alakashee, B. A., Al-Saud, K. M., & Saleh, S. J. (2025). Promoting the belief in God among Muslim youth through primary science learning. *European Journal for Philosophy of Religion*, 17(2), 527–552. <https://www.philosophy-of-religion.eu/article-view.php?id=4790>
- Al-Barakat, A. A., & Bataineh, R. R. (2011). Preservice childhood education teachers' perceptions of instructional practices for developing young children's interest in reading. *Journal of Research in Childhood Education*, 25(2), 177–193. <https://doi.org/10.1080/02568543.2011.556520>
- Al-Halalat, K., Beichi, A., Al-Barakat, A. A., AlAli, R. M., Al-Saud, K. M., & Aboud, Y. Z. (2024). Factors influencing the formation of intellectual security among university students: A field study. *International Journal of Cyber Criminology*, 18(1), 108–129. <https://cybercrimejournal.com/menuscript/index.php/cybercrimejournal/article/view/344>
- Al-Hassan, O., Al-Barakat, A., & Al-Hassan, Y. (2012). Pre-service teachers' reflections during field experience. *Journal of Education for Teaching*, 38(4), 419–434. <https://doi.org/10.1080/02607476.2012.707918>
- Al-Hassan, O. M., Alhasan, L. M., AlAli, R. M., Al-Barakat, A. A., Al-Saud, K. M., & Ibrahim, N. A. (2025). Enhancing early childhood mathematics skills learning through digital game-based learning. *International Journal of Learning, Teaching and Educational Research*, 24(2), 186–205. <https://doi.org/10.26803/ijlter.24.2.10>

- Alqahtani, M., & Altalhab, S. (2020). Impact of using blogs on summary writing skills of EFL university students. *Technology in Language Teaching & Learning*, 2(1), 36–50. <https://doi.org/10.29140/tltl.v2n1.317>
- Alsamadani, H. A. (2018). The effectiveness of using online blogging for students' individual and group writing. *International Education Studies*, 11(1), 44–51. <https://www.ccsenet.org/journal/index.php/ies/article/view/69994>
- Aravind, B. R., & Rajasekaran, V. (2021). Exploring dysphasia learners' vocabulary acquisition through the cognitive theory of multimedia learning: An experimental study. *International Journal of Emerging Technologies in Learning*, 16(12), 263–275. <http://dx.doi.org/10.3991/ijet.v16i12.22173>
- Arndt, H., & Woore, R. (2018). Vocabulary learning from watching YouTube videos and reading blog posts. *Language Learning & Technology*, 22(3), 124–142. <https://www.lltjournal.org/item/10125-44660/>
- Assimonye, A. C., & Ibe, S. U. (2019). Developing creative writing skills in children. *Multidisciplinary Journal of Education Research and Development*, 3(1), 126–134. <https://acjol.org/index.php/mujerd/article/view/528>
- Bani Irshid, M. M. B., Khasawneh, A. A., & Al-Barakat, A. A. (2023). The effect of conceptual understanding principles-based training program on enhancement of pedagogical knowledge of mathematics teachers. *Eurasia Journal of Mathematics, Science and Technology Education*, 19(6), em2277. <https://doi.org/10.29333/ejmste/13215>
- Bataineh, M., & Bataineh, R. (2024). Personal learning environment and writing performance: The case of Jordanian young EFL learners. *Studies in Self-Access Learning Journal*, 15(1). https://sisaljournal.org/bataineh_bataineh/
- Bataineh, R. F., & Alqatnani, A. K. (2019). How effective is Thinking Maps® instruction in improving Jordanian EFL learners' creative reading skills? *TESOL Journal*, 10(1), e00360. <https://doi.org/10.1002/tesj.360>
- Bataineh, R. F., & Bani Amer, J. M. (2023). The effectiveness of MOE-endorsed professional development programs: Teacher perceptions. *Journal of Ethnic and Cultural Studies*, 10(3), 156–168. <https://doi.org/10.29333/ejecs/1750>
- Bataineh, R. F., & Mayyas, M. B. (2017). The utility of blended learning in EFL reading and grammar: A case for Moodle. *Teaching English with Technology*, 17(3), 35–49. <https://files.eric.ed.gov/fulltext/EJ1149423.pdf>
- Bataineh, R. F., Migdadi, A. S., & Al-Alawneh, M. K. (2020). Does Web 2.0-supported project-based instruction improve Jordanian EFL learners' performance. *Teaching English with Technology*, 20(3), 25–39. <https://bibliotekanauki.pl/articles/955374>
- Bataineh, R. F., Rabadi, R. Y. A., & Smadi, O. M. (2013). Fostering Jordanian university students' communicative performance through literature-based instruction. *TESOL Journal*, 4(4), 655–673. <https://doi.org/10.1002/tesj.61>
- Fageeh, A. I. (2011). EFL learners' use of blogging for developing writing skills and enhancing attitudes towards English learning: An exploratory study. *Journal of Language and Literature*, 2(1), 31–48. https://www.researchgate.net/publication/287598642_EFL_learners'_use_of_blogging_for_developing_writing_skills_and_enhancing_attitudes_towards_English_learning_An_exploratory_study
- Fithriani, R., Dewi, U., Daulay, S. H., Salmiah, M., & Fransiska, W. (2019). Using Facebook in EFL writing class: Its effectiveness from students' perspective. *KnE Social Sciences*, 634–645. <https://doi.org/10.18502/kss.v3i19.4892>
- Fraihat, M., Khasawneh, A., & Al-Barakat, A. (2022). The effect of situated learning environment in enhancing mathematical reasoning and proof among tenth

- grade students. *Eurasia Journal of Mathematics, Science and Technology Education*, 18(6), em2120. <https://doi.org/10.29333/ejmste/12088>
- Hawamdeh, M., Khaled, M., Al-Barakat, A., & AlAli, R. (2025). The effectiveness of Classpoint technology in developing reading comprehension skills among non-native Arabic speakers. *International Journal of Information and Education Technology*, 15(1), 39–48. <https://doi.org/10.18178/ijiet.2025.15.1.2216>
- Huynh, T. H., & Hien, T. T. T. (2024). Sophomores' perceptions towards enhancing writing skills through blogging in English. *International Journal of Science and Management Studies*, 7(4), 92–99. <https://doi.org/10.51386/25815946/ijsms-v7i4p112>
- Khasawneh, A., Al-Barakat, A., & Almahmoud, S. (2023). The impact of mathematics learning environment supported by error-analysis activities on classroom interaction. *Eurasia Journal of Mathematics, Science and Technology Education*, 19(2), em2227. <https://doi.org/10.29333/ejmste/12951>
- Khasawneh, A. A., Al-Barakat, A. A., & Almahmoud, S. A. (2022). The effect of error analysis-based learning on proportional reasoning ability of seventh-grade students. *Frontiers in Education*, 7, 899288. <https://doi.org/10.3389/feduc.2022.899288>
- Kuo, Y.-C., Belland, B. R., & Kuo, Y.-T. (2017). Learning through blogging: Students' perspectives in collaborative blog-enhanced learning communities. *Educational Technology & Society*, 20(2), 37–50. <https://eric.ed.gov/?id=EJ1137346>
- Mabuan, R. A. (2018). Using blogs in teaching tertiary ESL writing. *English Review: Journal of English Education*, 6(2), 1. <https://doi.org/10.25134/erjee.v6i2.1238>
- Mangen, A., & Pirhonen, A. (2022). Reading, writing, technology, and embodiment. In S. L. Macrine & J. M. B. Fugate (Eds.), *Movement matters. How embodied cognition informs teaching and learning* (pp. 103–117). MIT Press.
- Nasir, B., Sarwat, S., & Imran, M. (2021). Effect of English creative writing on students' academic progress at graduation level. *Palarch's Journal of Archaeology of Egypt/Egyptology*, 18, 3347–3357. <https://archives.palarch.nl/index.php/jae/article/view/10374>
- Nguyen, T. M., & Dat, B. (2020). Exploring teachers' and students' perceptions of and attitudes towards the use of blogs for English writing skills at a Vietnamese university. *VNU Journal of Science: Education Research*, 36(4). <https://tailieu.mienphi.click/file/73a33d3d-7d74-494c-ba3a-2f7aa926122e>
- Obeiah, S. F., & Bataineh, R. F. (2016). The effect of portfolio-based assessment on Jordanian EFL learners' writing performance. *Bellaterra Journal of Teaching and Learning Language and Literature*, 9(1), 32–46. <https://raco.cat/index.php/Bellaterra/article/view/306905>
- Ozkan, Y. (2011). Blogging in a teaching skills course for pre-service teachers of English as a second language. *Australasian Journal of Educational Technology*, 27(4). <https://doi.org/10.14742/ajet.943>
- Potts, R., Davies, G., & Shanks, D. R. (2019). The benefit of generating errors during learning: What is the locus of the effect? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 45(6), 1023–1041. <https://doi.org/10.1037/xlm0000637>
- Potts, R., & Shanks, D. R. (2014). The benefit of generating errors during learning. *Journal of Experimental Psychology: General*, 143(2), 644–667. <https://doi.org/10.1037/a0033194>
- Rini, T. A., & Cahyanto, B. (2020, November). Supporting elementary students creative writing skill with assessment as learning. In *Proceedings of the 2nd Early Childhood*

- and Primary Childhood Education (ECPE 2020): *Advances in Social Science, Education and Humanities Research*, 487, 51–57.
<https://doi.org/10.2991/assehr.k.201112.010>
- Said, N. E., Yunus, M., Doring, L. K., Asmi, A., Aqilah, F., & Su Li, L. (2013). Blogging to enhance writing skills: A survey of students' perception and attitude. *Asian School Science*, 9(16), 95–100.
<https://ccsenet.org/journal/index.php/ass/article/view/32385>
- Santosa, A. B., Basuki, Y., & Puspita, A. M. I. (2019). The effectiveness of local wisdom-based teaching materials in enhancing creative writing skills of elementary school students. *Journal of English Language Teaching and Linguistics*, 4(3), 349–359.
<https://doi.org/10.24036/jeltl.v4i2.81>
- Strawhacker, A., Lee, M., & Bers, M. U. (2018). Teaching tools, teachers' rules: Exploring the impact of teaching styles on young children's programming knowledge in ScratchJr. *International Journal of Technology and Design Education*, 28(2), 347–376.
<https://doi.org/10.1007/s10798-017-9400-9>
- Tosuncuoglu, I. (2018). Forming well-organized writing activities. *Journal of Education and Training Studies*, 6(6), 122–127.
<https://files.eric.ed.gov/fulltext/EJ1178086.pdf>
- Vicol, M.-I., Gavriluț, M.-L., & Măță, L. (2024). A quasi-experimental study on the development of creative writing skills in primary school students. *Education Sciences*, 14(1), 91. <https://doi.org/10.3390/educsci14010091>
- Wang, L. (2019). Rethinking the significance of creative writing: A neglected art form behind the language learning curriculum. *Cambridge Open-Review Education Research*, 6, 110–122. <https://doi.org/10.17863/CAM.46573>
- Yan, Z., Chiu, M. M., & Ko, P. Y. (2020). Effects of self-assessment diaries on academic achievement, self-regulation, and motivation. *Assessment in Education: Principles, Policy & Practice*, 27(5), 562–583. <https://doi.org/10.1080/0969594X.2020.1827221>
- Yanto, Y., Fajria, N., & Al Arif, T. Z. Z. (2021, August). Students' perceptions of English creative writing using the weblogs. In *Proceedings of the 3rd Green Development International Conference (GDIC 2020)* (pp. 433–438). Atlantis Press.
<https://doi.org/10.2991/aer.k.210825.074>
- Zedelius, C., Mills, C., & Schooler, J. W. (2019). Beyond subjective judgments: Predicting evaluations of creative writing from computational linguistic features. *Behavior Research Methods*, 51, 879–894. <https://doi.org/10.3758/s13428-018-1137-1>