

*Research Article*

# Evaluating the Effectiveness of Online-Based ESL Writing Instruction: Insights from Public and Private School Teachers in Sabah, Malaysia

Fay Fiona Constantine Limbai<sup>1</sup>, Asmaa AlSaqqaf<sup>2\*</sup>

<sup>1</sup>AMC University College, Kota Kinabalu, Sabah, Malaysia; [fayfiona@amccollege.edu.my](mailto:fayfiona@amccollege.edu.my)

<sup>2</sup>Centre for the Promotion of Knowledge and Language Learning (PPIB), Universiti Malaysia Sabah (UMS), Kota Kinabalu, Sabah, Malaysia; [asma3030@ums.edu.my](mailto:asma3030@ums.edu.my)

Received: 7 April 2025; Revised: 4 August 2025; Accepted: 8 October 2025; Published: 25 October 2025

*\*corresponding author*

---

## Abstract

The research assesses the effectiveness of English as a Second Language (ESL) writing instruction via the internet among the teachers in the public and private sector schools in Sabah, Malaysia. Quantitative cross-sectional survey design was adopted, and through 117 ESL teachers (102 public, 15 private), it was studied how they understood their online teaching efficacy amid COVID-19. The outcome stated that it is moderately effective, with the average (mean) scores being a bit higher in the case of public-school teachers ( $M=3.10$ ) than in the case of private school teachers ( $M=2.99$ ), but the independent t-test did not show statistically significant differences ( $t(115)=0.566, p=0.572$ ). Issues like poor quality internet access, infrastructure foundations in digital resources and challenges in student engagement stood out, especially in rural places. The research highlights the requirement of heightened professional development of teaching staff, equal advancement of infrastructure, and mixed learning models to maximise online ESL writing classes. These results add to the debate on equity in education provisions in resource-stressed environments and provide some useful policy suggestions to the decision-makers.

**Keywords:** Keywords: Web-based instruction, second language writing, technology integration, teaching practices, educational equity

---

## INTRODUCTION

Technology integration in education has changed the teaching and learning practices, especially for those learners learning English as a Second Language (ESL). Still, writing, which remains one of the important areas of English Language Learning (ELL) due to its significance in the respective communication as well as self-expression, presents a significant area of concern among the Malaysian students who are output Malay language learners. The Malayan government initiated the institutionalisation of English as the Second Language (L2) in 1957 and made English a core subject in Malaysian schools at all levels of education (Darmi & Albion, 2013). The need for writing skills is further hugely emphasised, given that ESL learners must make sense of academic tasks and content taught in English.

The COVID-19 pandemic led to a move from face-to-face to fully online delivery, thus creating difficulties for ESL writing education. Teachers began teaching in virtual environments, with little technological sophistication and little preparation for distance education (Spiteri & Chang Rundgren, 2020). These difficulties were compounded by systematic problems, including inconsistent internet connection, poor ICT facilities, and negligible sponsorship from institutions in the remote regions, specifically Sabah (Cheok et al., 2017; Ating, 2020). Challenges that were witnessed in the restructuring of original writing skills include: The interruption of teaching-learning processes occasioned by students' involvement in non-academic activities during online classes, and the rising trends in plagiarism (Mustafa, 2016). Such challenges underscore the importance of employing effective internet-based methods for teaching ESL writing, utilising relevant approaches.

Online-based writing instruction of ESL has brought a range of challenges to the teachers, such as low digital literacy (Spiteri & Chang Rundgren, 2020), lack of stable internet connection (Cheok et al., 2017; Ating, 2020), as well as problems with timely feedback (Ferri et al., 2020). Due to a lack of resources, these problems are even more prominent in environments, such as Sabah, where the existing infrastructural disparity between urban and rural locations further limits equal access to opportunities in education (Singh et al., 2018). Efforts to engage students (Ferdinand-James, 2021) and to deal with plagiarism (Mustafa, 2016) are also reported by teachers as they express how these systemic barriers are challenging their work.

Nevertheless, there are certain advantages to developing new ways of ESL lessons based on a distance learning approach that presupposes the usage of information technologies in the class. It is established that information tools like wikis and collaborative spaces can enhance students' writing skills under the following conditions (Costley, 2014; Lin & Yang, 2011). However, it has been criticised that the effectiveness of instruction mediated by the internet depends on contextual factors such as the age and experience of the teacher or the type of school, in addition to their skills in using technologies in instruction and their ability to transform instruction to the online environment (Bhattacharjee & Deb, 2016; Heryandi et al., 2020). The next part of this study is therefore identifying strategies that would correspond to these contextual variables in a bid to enhance the learning outcomes in the online ESL writing instructions.

This article review assessed an online-based ESL writing teaching-learning process in Sabah, Malaysia, focusing on the perception of the teachers from the public and private schools. This paper focuses on the required approach when teaching in this modality to understand how to optimise the students' writing performance. This paper contributes to the development of online ESL teaching by emphasising the assumption of enhancing the theoretical models and offering practical assistance and tools to the teachers who are working in the changing educational environment.

### **Research Objectives**

- RO1 To examine how effective the online-based ESL writing instruction is from the viewpoints of ESL public and private school teachers in Sabah, Malaysia
- RO2 To identify whether there is any difference in the effectiveness of online-based ESL writing instruction among ESL public and private school teachers in Sabah, Malaysia

### **Research Questions**

- RQ1 How effective is the online-based ESL writing instruction based on the viewpoints of ESL public and private school teachers in Sabah, Malaysia?

RQ2 Is there any difference in the effectiveness of online-based ESL writing instruction among ESL public and private school teachers in Sabah, Malaysia?

## LITERATURE REVIEW

### Challenges and Effectiveness of ESL Writing Instruction

It is common knowledge that writing is one of the most challenging areas of ESL learning because it involves a command of grammatical structures. Rao (2019) points out that writing skills are more difficult for students learning English as a second language compared with other skills because it involves both the phonological, morphological, semantic and syntactic features of the second language. It indirectly contributes to the learners' abilities to develop their ideas systematically in an articulated structure, besides enhancing their word database, spelling, and grammatical mastery and enhancing the long-term foundational knowledge (goFLUENT, 2019). Everyone needs to write to improve practice as it helps the brain wire the information to learners' brains and provides a deeper understanding, as well as enhances their ability to recall information (goFLUENT, 2019). However, the current COVID-19 pandemic has forced the shift of most of the ESL writing instruction online. There are drawbacks such as low technology literacy, the lack of facilities, and inadequately trained teachers, as observed by Constantine Limbai and AlSaqqaf (2024).

It is against this background that the capability of writing instruction can be judged based on the extent to which it caters for the diverse and sometimes enduring difficulties experienced by learners. According to Fareed et al. (2016), patterns of learning difficulties that evolved year after year are evident, where ESL students had inadequate vocabulary, mishaps in grammar usage and weak content in sentence formation. Another serious barrier remains the knowledge of grammar, even within those categories of students who had a good practice in the English language, including subject-verb agreement, tenses, and prepositions (Anh, 2019). Coherence and cohesion are other fundamentals of writing, which most students often find challenging to address, and this hampers their effort in writing consistent and meaningful work (Moses & Mohamad, 2019). These problems are even more magnified when placed in the online learning environment because many factors, such as limited face-to-face contact, students' higher self-direction, and differing degrees of computer proficiency, can strengthen existing challenges. According to Constantine Limbai and AlSaqqaf (2024), it is imperative that such challenges in implementing digital pedagogy need more than appropriate instructional methods but also require appropriate interventions aimed at the enhancement of the preparedness of teachers and infrastructure support.

These are some of the challenges teachers face while implementing writing instruction; they are an essential component in dispelling these hurdles, but they also struggle. The identification of competency levels of students, the development of social relations with the students and the formulation of learning plans based on students' learning environment are demanding tasks which require a lot of time and energy from the side of teachers (Moses & Mohamad, 2019). But in the case of online-based teaching, these tasks are even more challenging to perform. Furthermore, Constantine Limbai and AlSaqqaf (2024) elucidate that the pandemic-induced transition from physical to virtual classrooms exposed shortcomings in teacher training and social inequities, particularly evident in resource-constrained areas of Sabah, Malaysia. According to their work, there is a problem with the variety of training for preparing teachers to work in an online environment, as the training is needed to enhance teachers both technologically and academically. Akin to infrastructural developments, these programmes are pivotal for enhancing teacher self-confidence, along with facilitating how writing instruction is done effectively in online modes.

## **The Role of Digital Tools in Enhancing ESL Writing Instruction**

The purpose of the present work is to show how the use of digital tools, especially during the COVID-19 pandemic, has affected teaching practices. In Malaysia, the pandemic forced a switch to hybrid learning delivery, a mixture of face-to-face class practice and online learning in response to the new normal (Ating, 2020; Chung, 2021). However, as in many other countries, the education system was under unprecedented pressure on how to switch to remote learning. Ating (2020) noted that the ongoing COVID-19 pandemic has had a great impact on educational institutions, prompting teachers to search for new strategies on how they can continue imparting knowledge despite the average disruption. Technological advancements, especially in cases of delivering teaching and learning via Educational Technologies, have created both benefits as well as some difficulties, especially regarding ESL writing education. In this regard, digital tools have been appreciated as effective support for the improvement of instruction in ESL writing, and the contribution of online learning tools to increasing the effectiveness of ESL writing has become an active focus of discussion.

In their systematic review targeted to teachers, Purcell et al. (2013) also discuss the overall salutary influence of digital media on writing, revealing that most of the participants positively assessed the role of the digital tools in fostering creativity and writing organisation. More so, 50% of the teachers indicated that the use of digital platforms eases the teaching of writing, a discovery that shows the possible advantages of technology in offering distance learning. Malaysia has shifted the implementation of its learning process to online implementation, and there are questions about whether the teachers are ready to handle such. According to the Deputy Chairman of Private Education Entrepreneur Association Malaysia, Nonadiah Abdullah, stated that online learning does not complement traditional education; nevertheless, teachers must prepare themselves and their pedagogy to adapt quickly to a digital learning structure in case the system wishes for it (Chung, 2021). Such flexibility is essential in making sure students in ESL classes get their needs met, no matter the situation that might be around.

The progress in digital education has also been swift, which in turn created questions for the systematic alteration in the teaching process as well. Boyes (2018) opines that the majority of learning happening in traditional classroom settings can hardly in any way address the needs of learners in today's institutions, given that knowledge can easily be obtained through the internet. While e-learning platforms are becoming more popular, now teaching must ensure that students develop the relevant skills to function in a world that belongs to computers. Thus, the development of ESL writing instruction cannot attend to solely address the technical aspects of text production while also learning to integrate multimedia technologies into their writing processes. Li and Lalani (2020) understand that e-learning has impacted the learning process, and looking at how students pursue content, a shift in how students can practice their writing. Nonetheless, for these tools to be valid, the students and educators must possess an understanding of such tools and further can manipulate these tools for his/her benefit.

However, there are still some barriers to the effective use of the technology for the teaching of writing. According to Kilpatrick et al. (2014), more specifically, the effectiveness of the tools in use in the classroom depends on how they have been deployed. Teachers dominate the usage of technologies, while technology integration implies students' self-directed setups and innovations. Applebee and Langer (2011) have also added that with technology integrated into the teaching and learning process, there is the possibility of altering teaching and creating new opportunities for student learning activities; however, the tools are used to replicate classroom practices with more convenience to the teacher. This points to the need for preparing teachers not only in mastery of the technical aspects that are likely to be used but also the educational context that will enable them to set the class in a student-centred manner, which is likely

to promote interaction. Thus, only such an approach would allow the online-based teaching of ESL Writing to grow to its potential and equip students for functioning in the 21st century.

### **Teaching Practices for Online-Based ESL Writing Instruction**

Teacher practice proves to be a significant factor determining how successful ESL writing instruction is, more so when conducted online. Teaching practices describe what a teacher does in the classroom and how he or she communicates with the students and organises learning activities. Teacher training is also not just knowledge dissemination from the teacher to the tutees, but also the way the tutees learn about, interact with, work, and internalise content (Ababio, 2013). In ESL, a specific traditional teacher-centred method has been dominant in most classrooms, as most teachers are viewed as the source of all knowledge. This approach is useful in some way, for example, when the teacher is using the target language and giving the students proper demonstrations of how to use the grammatical rules. However, as Malaysia is shifting towards the learner-centred approach, it is necessary that practice change and strengthen the culture of learning, particularly in this online learning environment (Yusof et. al, 2020).

The current COVID-19 pandemic has shown how classrooms were evolving to increase the use of technology in teaching and learning since teachers were pushed to adopt online teaching without adequate understanding. In this regard, the principal part of a teacher who possesses efficient knowledge of technologies is crucial. An Innovative teacher refers not only to someone who knows the digital tools, but someone who uses them appropriately to make the process of teaching/learning more fun (Lynch, 2018). The use of ICT opens potential for student interactions, enhanced learning experiences and communication, which in turn are effective ingredients in enhancing the teaching and learning of ESL writing (Hicks, 2011). Besides, technology is highly effective in capturing the students' attention, especially in the case of students who have been introduced to technology-based materials. We examine how this transition from a traditional teacher-directed approach to using technology to deliver instruction can foster an individualised, open-learning environment for the current student population.

Ferri et al. (2020) acknowledge that they were able to demonstrate the importance of time management and the need to be able to offer timely feedback necessary in writing when being taught online. Writing is an elaborate process that would need a few cycles of critique to get the best out of a particular piece. This means that teachers must foster ways of providing nearly simultaneous feedback to students, for instance, through automated technologies of grammar and spell checkers, or one-on-one online meetings. These practices assist in covering the distance where no physical contact is made with a student in virtual classes.

Nevertheless, the effectiveness of computer-based teaching and learning processes in promoting ESL writing requires that teachers integrate the efficiency of the medium with teaching strategies that encourage learning. It is not a question of how to integrate technology into teaching and learning, but specific ways in which technology helps support writers. This newest type of learning environment demands both content knowledge of teachers regarding the digital tools that will be utilised in the classroom and pedagogical content knowledge that focuses on lesson development that cultivates interest, imagination, and evaluation skills. Although the development towards a more technology-oriented instructional style has been spurred by factors such as COVID-19, identifying technology integration's long-term benefit for ESL classrooms is feasible. The consideration of the efficiency of utilising computer technology to facilitate ESL writing instruction consequently depends on the teacher's skills in terms of using the technology and /or modern instructional strategies to assist the students in learning the English language.

In the case of Sabah, limited infrastructure adds another level of challenge to the teachers' practices. Singh et al. (2018) explain that the teachers in rural areas struggle with access to proper technology for enabling the strategies to be implemented. However, as pointed out by Haron et al. (2015), the basic practices are known to improve the learning model markedly, given that sophisticated utilities like emails for feedback and discussions are not accessible.

### **Advantages and Limitations of Online-Based Teaching**

There are several benefits of delivering ESL writing instruction online, most notably the flexibility of learning. Electronic learning helps students to learn with ease since there is no fixed timetable, and the use of graphics makes learning easier for ELL students (Halwani, 2017). Online education has the advantage of tradition in that it does not restrict the learner's access to educational resources by time or distance (Recolizado, 2017). Further, the integration of technology enhances group learning, hence enhancing students' understanding of the content (Sawhney, 2012). In Malaysia, the use of e-learning, especially in higher institutions of learning, has boosted students' capacity in learning English conveniently by making available several platforms which students can easily access using a computer or any mobile device (Haron et al., 2015).

Nevertheless, there are pros and cons of online learning which compromise the efficacy of the learning systems. There are both analytic and synthetic problems regarding the role of technical impairments in students' overall learning and the burden these impairments place on teachers, such as low bandwidth or outdated hardware, including computers and other facilities (Nieves, 2012; Sawhney, 2012). Also, in terms of delivery mode, Nieves (2012) observed that students feel lonely because they never see each other eye to eye, thus making it hard for them to be fully involved in learning. While technology is beneficial in the sense that learners can learn at their own pace, it poses a disadvantage in that students do not have someone directly to urge them on and perhaps ensure that they are disciplined enough to go through their course on their own (Recolizado, 2017). There is this 'penalty' common amongst economically precarious students who may not be able to access the facilities required for efficient online learning, as pointed out in a report by Reich et al. (2020).

The COVID-19 pandemic has brought these weaknesses to the forefront and especially the move to online learning in schools. Various students perform differently in home-based learning; however, students with low academic performance before the pandemic are likely to be negatively affected (Reich et al., 2020). Despite such adversities, they have come out strong and categorically affirmed the fact that teachers are more inclined to stage adequate learning that suits the new digital learning environment. Hence, despite the likelihood of improving language learning through ESL writing instruction conducted online, there is certainly a caution that it is contingent upon overcoming certain technical and motivational concerns that are more likely to be prevalent online, as well as ensuring equal access to the online learning environment for all the roles represented in this study.

## **METHODOLOGY**

### **Research Approach and Design**

The method used in this study is quantitative to determine the viability of online-based teaching of ESL writing skills. A cross-sectional survey design was employed, and data were collected from ESL teachers teaching in both public and private schools in Sabah. One of the major categories of educational research is quantitative research, which involves the collection and comparison of numerical information with the view of establishing patterns or investigating hypotheses. The collected data will be described and

analysed with the help of IBM SPSS 29 to learn more about modern practices and attitudes toward online ESL writing education.

To check the differences in perceived effectiveness in both groups of teachers from public and private schools, the independent variables t-test will be applicable (Pallant, 2016). They include information on school type and its implications on teachers' perception of online-based ESL writing instruction and the improvement of the students' teaching methodologies in the diverse nature of educational systems in Sabah. This research design entails a sound approach by which the potential of online ESL instruction can be investigated based on valid and reliable data collected for statistical analysis.

### **Population and Sampling Technique**

The target population was 3,924 ESL teachers in 1,269 public and 39 private schools in Sabah. It used a simple random sampling method wherein participants are selected in accordance with two criteria: they have experience in teaching online-based ESL writing during the onset of the pandemic, and have access to the necessary technological tools. Bartlett's Test of Variances was used to decide on the sample size of 119 that is statistically valid regarding a relational survey design. Although the sample had a larger percentage of public-school teachers (87.18%), it assumes that the real percentage of ESL teachers in Sabah is occupied by the institutions of the government. The lesser group school (12.82) was admitted, following the initial comparison, and a cautious remark was made regarding the lack of generalizability due to the small sample size.

To achieve a proper sampling of teachers from public and private schools, the simple random sampling technique was used. Participants were selected based on two inclusion criteria: those who had already taught online-based ESL writing classes throughout the pandemic and had the technological means to do so. A sample size of 119 was obtained using Bartlett's test of variances, applicable to the minimum required sample size to establish a relational survey design. Descriptive statistics for continuous data were done at a minimum of 0.05, following the concepts outlined in Bartlett et al. (2001).

### **Research Instrument**

This research employs a quantitative research method with a survey questionnaire to gather information on the teaching of ESL writing during the COVID-19 outbreak through online means. The survey sample shapes a comprehensive picture of the ESL teachers, though non-response error is minimised through structured methods of sample selection, distribution and follow-up (Ponto, 2015). The survey for this study will be an online Google Form, which will enable efficient data collection from a large audience and provide regional and temporal benefits even during the limitations of the pandemic.

Self-constructed survey is used in this study to examine the impact of the pandemic on online-based teaching of ESL writing. The items for the survey were adapted from established sources (Shahzad & Javed, 2013; Bracher, 2013; Larsen, 2012). A total of 9 questions were included, and they all were related to the topic. The survey seeks to establish the general perception toward online ESL writing instruction from teachers who have, in one way or another other used these methods while unlocking unprecedented circumstances occasioned by COVID-19. The reliability of online teaching was measured as 9 9-item survey based on the key dimensions of the effectiveness of online teaching, such as technology integration, engagement with students, and their feedback, adapted based on tested instruments (Larsen, 2012; Bracher, 2013).

### **Validity and Reliability of the Research Instrument**

Validity and reliability for the research instrument were considered separately, which consisted of nine questions that assessed the practice of online-based teaching for ESL writing skills during the COVID-19 pandemic. These items were adopted from previous research works of Larsen (2012), Bracher (2013), and Shahzad and Javed (2013) that were relevant to the objectives of the current study.

Since the accuracy of the survey instrument was important in measuring the effectiveness of online-based ESL writing instruction, validity and reliability were tightly controlled. As for validity, it was determined by consulting two expert validators from Universiti Malaysia Sabah (UMS), who each possessed a doctorate in TESL. Their feedback enabled the questionnaire items to be in line with the objectives of the study and the research questions. Despite this, concerns were raised regarding the order and organisation of some questions, and, therefore, new improvements were made in fixing these issues. Moreover, face validity was established by seeking a review from three other professionals, specialised in the field where face validity is being conducted. These suggestions were integrated to improve the readability and applicability of the items of the questionnaire to capture better data.

On the other hand, the reliability of the instrument was tested by using the internal consistency approach, using Cronbach's Alpha to assess the stability of the results in the current survey (Cronbach, 1951). Cronbach's Alpha coefficient, being 0.70 to 0.90, was deemed reliable; the Cronbach's Alpha for instrument reliability was 0.85. A pilot study was conducted on SPSS 29 and was chosen to cover the target population in the present study. Cronbach's alpha was used to test the reliability in terms of internal consistency. The analysis showed that the Cronbach's Alpha value was 0.961, which capped the acceptable range of 0.7. This high reliability coefficient supported the internal reliability and validity of the nine items as indices of the efficiency of online-based ESL writing instruction.

**Table 1:** Distribution of respondents by items

Cronbach's Alpha	Cronbach's Alpha based on standardised items	N of Items
0.961	0.960	9

## RESULTS AND DISCUSSION

### Results

117 participants completed the Google Forms questionnaire; this included teachers in both public and private schools at the primary and secondary levels. Demographic analysis of the sample shows that 87.18% (102) of the respondents were teachers in public schools and 12.82% (15) in private schools. Concerning gender breakdown, 24.79% of the teachers were male, and 75.21 % were female ESL teachers. Regarding age, participants were relatively young, with 20.51% aged between 20-29 years; 32.48%, aged between 30-39 years; 33.33%, aged between 40-49 years; and 13.68% aged equal to or more than 50 years. Working experience was categorised into five groups: 22.22% had less than 5 years, 18.80% had between 6-10years, 17.95 % had between 11-15years, 16.24% had between 16-20 years, and 24.79% had more than 20 years of teaching experience.

Concerning the assessment of online teaching effectiveness, SPSS 29 was used to compute the means of nine Likert questions in the questionnaires. On the scale mean, the public-school respondents obtained a slightly higher mean score of 3.10 than the private school respondents, who had a mean score of 2.99; the overall mean score was 3.08. These mean scores are positive and imply a neutral reception of the online



teaching of ESL writing in both public and private institutions. To further support this assertion, the authors found that the results fell exactly in the middle of the Likert scale used in the questionnaires. To check the distribution of the data skewness and kurtosis were computed. Public overall mean skewness was 0.275 and Kurtosis value of 0.067, while private overall mean skewness value was -0.592, and the Kurtosis value was -0.414. As shown in Table 2, public school teachers reported slightly higher perceived effectiveness. According to George and Mallery (2010) as well as Gravetter and Wallnau (2013), anything within skewness and kurtosis of 1.96 to + 1.96 is considered a normal distribution of univariate.

**Table 2:** Mean report on the effectiveness

School	Mean	N	Std. Deviation	Kurtosis	Skewness
Public	3.1024	102	.69322	.067	.275
Private	2.9926	15	.75647	-.414	-.592
Total	3.0883	117	.69917	.021	.146

Therefore, this study used an independent-samples t-test analysis to compare the overall teaching and learning effectiveness of online-based learning during COVID-19 among ESL teachers teaching in private and public schools in Sabah, Malaysia. Further analysis to test the homogeneity of variances was done by carrying out Levene's F test, which gave  $F(115) = 0.257$ ,  $p = 0.613$ , whereby it is clear that the variance between the two groups is homoscedastic. In both groups, the independent-samples t-test revealed no statistically significant difference in perceived effectiveness between public and private school teachers,  $t(115) = 0.566$ ,  $p = 0.572$ . Because  $p > 0.05$ , it was impossible to reject the null hypothesis, so it was concluded that ESL teachers from both public and private schools had the same perception about the effectiveness of online-based teaching and learning. Also, the overall mean effectiveness score was 3.10,  $SD = 0.69$  in the public-school sample and 2.99,  $SD = 0.76$  in the private school sample, respectively. Based on these findings, there is a similarity in perceiving the effectiveness of online teaching within the two types of schools during the pandemic.

**Table 3:** Independent-Samples T-Test on the effectiveness

Group Statistics					
	School	N	Mean	Std. Deviation	Std. Error Mean
Mean Effectiveness Score	Public	102	3.1024	0.69322	0.06864
	Private	15	2.9926	0.75647	0.19532

  

Independent Samples Test			
		Mean Effectiveness Score	
		Equal variance assumed	Equal variance not assumed.
Levene's Test for Equality of Variances	F	0.257	
	Sig.	.613	
t-test for Equality of Means	t	.566	.530
	df	115	17.634
	Sig. (2-tailed)	.572	.602
	Mean Difference	.10980	.10980
	Std. Error Difference	.19391	.20703
	95% Confidence Interval of the Difference	Lower	-.27430
		Upper	.49390

## Discussion

According to the study by Constantine Limbai (2021), there was a need for adjustment by the government to enhance the best practices for online education, like the OECD (2020). The COVID-19 crisis disrupted education systems worldwide, mandating that schools transition from a conventional face-to-face learning environment to an online setting (OECD, 2020). Gradual changes of this sort caused problems for educators and learners, with variable results depending on the areas and contexts of learning. For instance, the Multivariate Analysis of covariance in the study conducted on Sabah, Malaysia, to investigate the efficiency of online-based ESL writing instruction among teachers in the public and private schools was a mixture of results. Although online teaching became a requisite during the COVID-19 outbreak to ensure students' learning did not stop completely, it was not very effective due to its drawbacks in terms of system and logistics, namely, students' and teachers' poor internet connections and lack of appropriate equipment (Nsirim, 2021; Kodiah, 2020).

Research done with ESL teachers serving in public schools in Sabah endorsed an impartiality toward the efficacy of online ESL writing instruction by yielding a mean of  $M = 3.10$ . Teachers had lots of problems: their working conditions worsened, and they had problems with assessment (Jan, 2021). Additionally, regarding the perception of the case with the management of online classes as contrasted to the traditional face-to-face cases, 32% of the public ESL teachers disagreed. García (2021) stressed that online teaching is unfit for primary and early childhood education because students cannot be autonomous learners at this stage. These issues were further worsened by the fact that there was little class participation among the students if they could not engage well enough due to a dearth of critical thinking abilities (Yates, 2021).

The mean score for private school ESL teachers in Sabah was also comparable, with a mean of  $M = 2.99$ . Though the difference is not significant statistically, it should be noted that during the analysis of the marginal mean (public: 3.10; private: 2.99), there is a slight deviation in access to resources or institutional support, which should be explored further. Private school teachers similarly identified that hampered the efficiency of Online instruction, especially in areas with weak network connections (Nsirim, 2021). Teachers interviewed in private schools said that they found it difficult to address student engagement, with many students who hesitated during the lessons or were absent during the entire lesson, mostly in large classes that demand more student-student interactions (Ferdinand James, 2021; Naqi, 2021). Such issues highlight the importance of a stable internet connection as an important driver of success in the delivery of teaching activities that are based on the internet.

The results also reveal statistically insignificant differences, which show that both the public and private school ESL teachers have comparable perceptions on the applicability of online-based ESL writing instruction. The findings of the study also confirmed the limitations inherent in online education towards both groups: Insufficient coverage of content, lack of attention, and connections (Wilson, 2021; Sahharon et al., 2017). This implies that even if online teaching presents possibilities as an aleatory setting in emergencies such as the pandemic, the efficacy in Sabah is impeded by systematic and pragmatic complexities. Overcoming these challenges will call for appropriate social and material support as well as redesigning the structures needed to complement online-based learning systems.

## PEDAGOGICAL IMPLICATIONS

The conclusions made by Constantine Limbai (2021) in the study are useful knowledge in increasing the online-based ESL writing teaching performance, which have meaningful teaching suggestions. One of the discussed recommendations involves constructing feedback-based practices in virtual learning environments. Web-based platforms need the application of feedback to be a continuous process to mimic

the rehearsal mechanism that most traditional classrooms offer. In that regard, practices like these would enable students to practice the process of CBL or the continuous improvement of their learning and skill acquisition. Also, a teacher should effectively incorporate technological tools which complement paired writing tasks, peer assessment and feedback, as they foster engagement and improve writing skills.

Another research question that this study seeks to answer is regarding the professional development of teachers teaching ESL online in Sabah, Malaysia. This implies that for teachers to effectively teach in a virtual environment, they must undergo special training to enable them to understand the different programmes required in the teaching process. Such programmes should aim at preparing educators with skills in student engagement, giving feedback, and the management of online classes. Lack of such preparation can lead to limited use of opportunities of digital platforms for learning or inability to support the diverse needs of learners among teachers. It would also allow the staff to keep updated with current innovations in technology and learning methods for their practice to be impact-resistant.

The study also established the need to develop, present and implement a new and more creative curriculum that enhances creativity amongst students. Multimedia-based writing tasks, with the help of interactive activities, must be integrated into ESL curricula proposed for online classes to make learning more engaging. For example, a video introduction or using stickers or games in retelling or creating a story can make writing fun and interesting. Furthermore, curricula also need to be contextualised towards online learning environments to take advantage of possible benefits of such designs: flexibility coupled with versatility, yet have considerations for the drawbacks, including minimal face-to-face interaction and distractions from the outside environment in virtual classrooms. Such gaps can be overcome by a good structure in the curriculum so that the students stay motivated towards the coursework (focused) and get the intended learning.

Finally, corresponding to the last concern, the technology question must be turned to achieve fairness in usage that would make learning using these gadgets possible for everyone. The key stakeholders who have a critical responsibility include policymakers and administrators of schools to ensure all learners, especially rural and remote students, have positive technological connections and adequate access to stable internet connections. For this reason, if such measures are not put in place, differential access would worsen current differentiation in the delivery of education and put learners from disadvantaged backgrounds at a considerable disadvantage. Promoting the number and use of technology in ESL classrooms is not only a means of fairness but can significantly determine the efficiency of online ESL instruction. These are added to the strategies mentioned above, can go a long way in enhancing the quality and/or inclusiveness of online ESL writing education efforts.

## **RECOMMENDATIONS**

The above recommendations offer a solid platform regarding how to overcome some of the difficulties and how some of the difficulties regarding online-based ESL writing instruction can be dealt with. Firstly, the use of a blended learning approach is an innovative practice that will go a long way in harnessing the benefits of face-to-face teaching and learning as well as online, distance learning education system. In combining the two approaches, efficacy is achieved since the teacher can encourage students' participation, enhance the quality of feedback received, and design a delivery plan to fit students' needs. This approach is noteworthy when implemented to minimise the problems of an environment that lacks body presence, which is often associated with reduced motivation and reduced levels of engagement between students. Additionally, hybrid learning can be used as a transformation model to help students and teachers adapt to advanced technology and further development of education delivery, particularly

taking into consideration some of the pedagogy issues raised by Constantine Limbai (2021) and Manca and Ranieri (2016).

As important as content development is, the installation of infrastructure, especially in outlying areas, including Sabah, where high-speed internet connectivity and cheap electronic devices are still scarce. Students and researchers: the authorities and private organisations must collaborate to narrow this digital gap. Moreover, pre- and in-service teacher education should not be neglected, as practising teachers should be ready to apply ICT in their teaching practices. The above professional development programmes, enhancing teachers' interactive and adaptability skills, can improve ESL writing teaching and learning. Finally, more study is needed on the post-credit effects of online education on student accomplishment and cross-country comparisons to benefit future policy and instructional practices. In sum, all the mentioned recommendations should sound like the blueprint of a coherent programme for the enhancement of ESL writing education in Malaysia and other similar countries.

## CONCLUSION

As such, this study offers a rich theoretical and contextual development to the current literature on online-based ESL writing instruction. The study highlights the problems and possibilities of using technology to facilitate students' learning during the COVID-19 pandemic, and how these problems might be solved to improve the teachers' outcomes.

In theory, the study contributes to extending knowledge regarding the association between digital teaching and learning with ESL writing, especially in developing nations. This paper underscores the role of teacher beliefs within the perception of online instruction and brings evidence that would corroborate the incorporation of digital technology for the teaching of ESL writing. The research also incorporates information that differentiates the public-school teachers' perceptions of the online-based learning environment from those of their private school counterparts.

Contextually, therefore, the research responds to the difficulties observed among teachers in Sabah, a place that has historical discrepancies in the provision of information. Taken together, the findings provide specific policy-relevant suggestions to policymakers, educators, and other stakeholders to address these gaps and enhance the quality of online education. Specifically, by examining the successful practices in teaching and learning gestural and pose-related vocabularies in the context of ESL writing, this educational study aims to present a framework for improving the access and equality of learners.

Thus, this paper illustrates that, despite the numerous challenges that online-based teaching poses to ESL writing instruction, there are possibilities for innovative practices. These categories of deficiency can be resolved through well-informed and targeted approaches to the deployment of digital platforms to learning, as these reveal their strength as well as areas of weakness that, when corrected or adapted, promote efficiency in teaching and learning. In this regard, this research presents a groundwork for further studies on the role of digital education in the development of ESL instruction in Malaysia and other countries in the future.

## ACKNOWLEDGEMENTS

The authors would like to thank all the participants from the various public and private schools in Sabah, Malaysia, for their input and information. Pertinently, the authors are grateful to Universiti Malaysia Sabah for its support throughout the study.

## CONFLICTS OF INTEREST

The authors have no conflict of interest in the management of this study or the writing of this article.

## AUTHOR CONTRIBUTIONS

**Fay Fiona Constantine Limbai:** Conceptualisation, Methodology, Data Collection, Analysis, and Writing – Initial Draft Preparation. **Asmaa AlSaqqaf:** Supervision, Conceptualisation, Validation, Reviewing, and Editing.

## DATA AVAILABILITY STATEMENT

The author wishes to state that all generated data used to develop ideas included in this article have proper references. Due to privacy/ethical concerns, data related to the findings of this study are only available on request from the corresponding author.

## REFERENCES

- Ababio, B. T. (2013). Nature of teaching : What teachers need to know and do. *International Journal for Innovation Education and Research*, 1(03), 37–48.
- Anh, D. (2019). EFL students' writing skills: Challenges and remedies. *IOSR Journal of Research & Method in Education*, 9(6), 74–84. <https://doi.org/10.9790/7388-0906017484>
- Applebee, A., & Langer, J. (2011). A Snapshot of writing instruction in middle schools and high schools. *The English Journal*, 100(6), 14–27.
- Ating, R. (2020). Challenges to learning and teaching in Malaysia in the time of Covid-19. *Shape-SEA*. <https://shapesea.com/op-ed/covid-19/challenges-to-learning-and-teaching-in-malaysia-in-the-time-of-covid-19/>
- Bartlett, J. E., Kotrlik, J., & Higgins, C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19.
- Bhandari, P. (2020). An introduction to quantitative research. *Scribbr*. <https://www.scribbr.com/methodology/quantitative-research/>
- Bhattacharjee, B., & Deb, K. (2016). Role of ICT in 21st century's teacher education. *International Journal of Education and Information Studies*, 6(1), 1–6. [https://www.ripublication.com/ijeis16/ijeisv6n1\\_01.pdf](https://www.ripublication.com/ijeis16/ijeisv6n1_01.pdf)
- Boyes, K. T. (2018). Why our education system needs to change. *Karen's Blog*. <https://www.karentuiboyes.com/2018/09/why-our-education-system-needs-to-change/>
- Bracher, J. (2013). A survey of online teaching by native-speaker English instructors at Japanese universities. *The JALT CALL Journal*, 9(3), 221–239. <https://doi.org/10.29140/jaltcall.v9n3.j156>
- Cheok, M. L., Wong, S. L., Ayub, A. F. M., & Mahmud, R. (2017). Teachers' perceptions of e-learning in Malaysian secondary schools. *Malaysian Online Journal of Educational Technology*, 5(2), 20–33.
- Chung, N. (2021). Blending normal classroom with online learning is the future, say educationists. *Free Malaysia Today*. [https://www.freemalaysiatoday.com/category/nation/2021/01/02/blending-normal-classroom-with-online-learning-is-the-future-say-educationists/?utm\\_source=FCM&utm\\_medium=Push](https://www.freemalaysiatoday.com/category/nation/2021/01/02/blending-normal-classroom-with-online-learning-is-the-future-say-educationists/?utm_source=FCM&utm_medium=Push)
- Constantine Limbai, F. F. (2021). *Investigating beliefs about online-based teaching and its effectiveness on teaching writing among esl teachers from public and private schools in Sabah, Malaysia* [Unpublished master's thesis]. Universiti Malaysia Sabah.
- Constantine Limbai, F. F., & AlSaqqaf, A. (2024). Digital pedagogy perspectives: Exploring ESL teachers' beliefs towards online-based ESL writing instruction. *International Journal of Academic Research in Progressive Education and Development*, 13(4), 3066–3077. <https://doi.org/10.6007/IJARPED/v13-i4/23725>
- Costley, K. C. (2014). *The positive effects of technology on teaching and student learning* (ED554557). ERIC. <https://files.eric.ed.gov/fulltext/ED554557.pdf>
- Creswell, J. W. (2012). *Educational Research* (4th ed.). Pearson.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334.
- Darmi, R., & Albion, P. R. (2013). English language in the Malaysian education system: Its existence and implications. Proceedings of the 3rd Malaysian Postgraduate Conference.
- Fareed, M., Ashraf, A., & Bilal, M. (2016). ESL learners' writing skills: Problems, factors and suggestions. *Journal of Education & Social Sciences*, 4(2), 83–94. <https://doi.org/10.20547/jess0421604201>
- Ferdinand-James, L. (2021). Student engagement in online learning environments: Challenges and strategies. *International Journal of Education*, 14(1), 78–86.

- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*, 10(4), 86. <https://doi.org/10.3390/soc10040086>
- García, M. (2021). Online-based teaching and its limitations in primary education during COVID-19. *Educational Development Review*, 15(2), 34-42.
- George, D., & Mallery, P. (2010). *SPSS for Windows step by step: A simple guide and reference, 17.0 update* (10th ed.). Allyn & Bacon, A Pearson Education Company.
- Ghabool, N., Edwina, M., & Kashef, H. S. (2012). Investigating Malaysian ESL students' writing problems on conventions, punctuation, and language use at the secondary level. *Journal of Studies in Education*, 2(3), 131-143. <https://doi.org/10.5296/jse.v2i3.1892>
- Gravetter, F. J., & Wallnau, L. B. (2013). *Statistics for the behavioral sciences* (10<sup>th</sup> ed.). Cengage learning.
- Gündoğmuş, H. D. (2018). The difficulties experienced by teachers in the process of primary reading and writing instruction and their solution offers for eliminating these difficulties. *Universal Journal of Educational Research*, 6(2), 333-339. <https://doi.org/10.13189/ujer.2018.060216>
- Halwani, N. (2017). Visual aids and multimedia in second language acquisition. *English Language Teaching*, 10(6), 53. <https://doi.org/10.5539/elt.v10n6p53>
- Haron, N. N., Zaid, Y. H., & Ibrahim, N. A. (2015). E-Learning as a platform to learn English among ESL Learners: Benefits and barriers. In M. Stapa & H. Jaafar (Eds.), *Research in language teaching and learning* (pp. 79-106). UTM Press.
- Heryandi, H., Fitriani, S., & Nababan, M. R. (2020). ICT integration in teaching: Enhancing teachers' competencies. *Jurnal Pendidikan*, 9(2), 123-134.
- Heryandi, Y., Said, I., & Herlina, R. (2020). Online teaching in writing by using means of slack application. *Journal of English Education and Teaching*, 4(1), 1-20.
- Hicks, S. D. (2011). Technology in today's classroom: Are you a tech-savvy teacher? *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 84(5), 188-191. <https://doi.org/10.1080/00098655.2011.557406>
- Hu, K., AlSaqqaf, A., & Swanto, S. (2020). E-learning readiness among English language teachers in Sabah, Malaysia: A pilot study. *Journal of English Language Teaching Innovations and Materials*, 2(2), 120-127. <https://doi.org/10.26418/jeltim.v2i2.42155>
- Hu, K. & AlSaqqaf, A. (2021). Investigating Malaysian teachers' technology acceptance towards integrating e-learning into English teaching. *Journal of English Language Teaching Innovations and Materials*, 3(2), 87-98. <https://doi.org/10.26418/jeltim.v3i2.46798>
- Jan, H. (2021). The challenges of online teaching during COVID-19: Insights from teachers. *Journal of Educational Practices*, 12(3), 56-67.
- Kilpatrick, J. R., Saulsbury, R., Dostal, H. M., Wolbers, K. A., & Graham, S. (2014). *The integration of digital tools during strategic and interactive writing instruction*. In R. E. Ferdig & K. E. Pytash (Eds.), *Handbook of research on digital tools for writing instruction in K-12 settings* (pp. 608-628). IGI Global.
- Kodiah, P. (2020). The digital divide and its impact on online education during the COVID-19 pandemic. *Digital Learning and Education Journal*, 6(1), 89-95.
- Larsen, L. J. E. (2012). *Teacher and student perspectives on a blended learning intensive English program writing course*. [Doctoral dissertation, Iowa State University]. Iowa State University Digital Repository.. <https://doi.org/10.31274/etd-180810-1937>
- Li, C., & Lalani, F. (2020). The COVID-19 pandemic has changed education forever. This is how. *World Economic Forum*. <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>
- Lin, W.-C., & Yang, S. C. (2011). Exploring students' perceptions of integrating Wiki technology and peer feedback into English writing courses. *English Teaching*, 10(2), 88-103.
- Lynch, M. (2018). 10 habits of tech-savvy teachers. *The Advocate*. <https://www.theedadvocate.org/10-habits-tech-savvy-teachers/>
- Manca, S., & Ranieri, M. (2016). Facebook and the others. Potentials and obstacles of social media for teaching in higher education. *Computers & Education*. 95, 216-230. <https://doi.org/10.1016/j.compedu.2016.01.012>
- Moses, R. N., & Mohamad, M. (2019). Challenges faced by students and teachers on writing skills in ESL contexts: A literature review. *Creative Education*, 10(13), 3385-3391. <https://doi.org/10.4236/ce.2019.1013260>
- Mustafa, N. (2016). The prevalence of plagiarism among students in higher education. *Asian Journal of Education*, 4(1), 67-74.
- Naqi, R. (2021). Large class sizes and their impact on online learning during COVID-19. *Teaching and Learning Journal*, 10(3), 45-50.
- Nieves, J. (2012). *The advantages and disadvantages of online learning*. [PowerPoint slides]. SlideShare. <https://www2.slideshare.net/Janna8482/the-advantages-and-disadvantages-of-online-learning>
- Nsirim, E. (2021). Internet connectivity and its effect on remote learning in rural areas. *Global Educational Insights*, 7(3), 23-30.
- OECD. (2015). *Students, Computers and Learning: Making the Connection*. PISA, OECD Publishing, Paris. <https://doi.org/10.1787/9789264239555-en>
- OECD. (2020). *Strengthening online learning when schools are closed - The role of families and teachers in supporting students during the COVID-19 crisis*. OECD Publishing. [https://www.oecd.org/en/publications/2020/09/strengthening-online-learning-when-schools-are-closed-the-role-of-families-and-teachers-in-supporting-students-during-the-covid-19-crisis\\_fe7bd7bb.html](https://www.oecd.org/en/publications/2020/09/strengthening-online-learning-when-schools-are-closed-the-role-of-families-and-teachers-in-supporting-students-during-the-covid-19-crisis_fe7bd7bb.html)
- Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (6th ed.). McGraw-Hill Education.
- Ponto, J. (2015). Understanding and evaluating survey research. *Journal of the Advanced Practitioner in Oncology*, 6(2), 168-16871.

- Purcell, K., Buchanan, J., & Friedrich, L. (2013). The impact of digital tools on student writing and how writing is taught in schools. *Pew Research Center*. <https://www.pewresearch.org/internet/2013/07/16/the-impact-of-digital-tools-on-student-writing-and-how-writing-is-taught-in-schools/>
- Rao, P. S. (2019). The significance of writing skills in ELL environment. *ACADEMICIA: An International Multidisciplinary Research Journal*, 9(3), 5. <https://doi.org/10.5958/2249-7137.2019.00035.1>
- Recolizado, J. C. (2017). *E-learning pros and cons* [PowerPoint slides]. SlideShare. <https://www2.slideshare.net/fagmaster3/e-learning-pros-and-cons-81214984>
- Reich, J., Buttner, C., Fang, A., Hillaire, G., Hirsch, K., Larke, L., Littenberg-Tobias, J., Moussapour, R. M., Napier, A., Thompson, M., & Slama, R. (2020). *Remote learning guidance from state education agencies during the COVID-19 pandemic: A first look* (Preprint). EdArXiv. <https://doi.org/10.35542/osf.io/437e2>
- Sahharon, H., Bolong, J., & Omar, S. Z. (2017). Problems in using the wireless village services in Malaysia: The non-users perspectives. *International Journal of Academic Research in Business and Social Sciences*, 7(3), 224–234. <https://doi.org/10.6007/IJARBS/v7-i3/2728>
- Sawhney, N. (2012). E-learning: Global education without walls. *International Journal of Education and Applied Social Sciences*, 3(0976).
- Shahzad, M., & Javed, S. (2013). *Improving education through e-learning* [Master's thesis, University of Borås, School of Business and IT]. DiVA Portal. <https://urn.kb.se/resolve?urn=urn:nbn:se:hb:diva-17266>
- Singh, K. K. K., Yamat, H., & Wahi, W. (2018). Teachers' beliefs on technological fusion in teaching ESL students. *Creative Education*, 9(14), 2162–2175. <https://doi.org/https://doi.org/10.4236/ce.2018.914154>
- Spiteri, M., & Chang Rundgren, S. N. (2020). Literature review on the factors affecting primary teachers' use of digital technology. *Technology, Knowledge and Learning*, 25(1), 115–128. <https://doi.org/10.1007/s10758-018-9376-x>
- Wilson, T. (2021). Comparing classical education and online-based teaching: A COVID-19 perspective. *Education and Technology Quarterly*, 5(4), 67-72.
- Yates, K. (2021). Barriers to student participation in online classes: Lessons from the pandemic. *Journal of Online Learning*, 8(4), 12-20.
- Yusof, Y., Roddin, R., Awang, H., & Mukhtar, M. I. (2020). Teachers and their teaching: Challenges and Desires in promoting Active Learning Climates. In K. Psarris (Ed.), *Proceedings of the 14th International Conference on Education and Educational Technology (EDU '15): Recent advances in education and educational technology* (pp. 37–41). WSEAS Press. <http://www.wseas.us/e-library/conferences/2015/Malaysia/EDU/EDU-05.pdf>
- goFLUENT. (2019, February 12). The importance of writing in language learning. *goFLUENT*. <https://www.gofluent.com/blog/importance-of-writing-in-language-learning/>