

ENHANCING ESL LOW PROFICIENCY PRE-UNIVERSITY STUDENTS' WRITING SKILLS THROUGH FLIPPED WRITING FRAMEWORK

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Abstract

The flipped classroom model, which aims to foster learners' prior knowledge through online or offline platforms outside of class, thereby reserving in-class time for more interactive and collaborative learning, represents a significant pedagogical advancement, particularly in tertiary education especially during and post-pandemic. Despite extensive research into the efficacy of flipped learning in enhancing proficiency among English as a Second Language (ESL) learners across various domains, few studies have specifically addressed the enhancement of writing skills among low-proficiency ESL pre-university students through product-genre based flipped learning. Therefore, this study seeks to evaluate the impact of a product-genre based flipped classroom on academic writing (process writing) performance among low-proficiency ESL students, and to develop a tailored flipped learning framework for ESL students at the pre-university level. Using an experimental design, the study compared traditional writing instruction in a control group with flipped classroom methods in an experimental group. Quantitative analysis yielded two significant findings: firstly, students' writing performance showed a marked improvement from pre-test to post-test when using the flipped classroom model; secondly, a positive correlation emerged between product-genre based flipped learning and writing performance. This study enriches the literature by providing

empirical evidence of how product-genre based flipped learning can enhance writing skills among low-proficiency ESL students. It also introduces a novel flipped writing framework tailored specifically for ESL pre-university students, offering educators a valuable resource for designing effective writing activities in this educational context.

Keywords: English as a second Language; flipped classroom; pre-university students; product-genre approach; writing performance

Abstrak

Model bilik darjah terbalik, yang bertujuan untuk memupuk pengetahuan sedia ada pelajar melalui platform dalam talian atau luar talian di luar kelas, seterusnya menyisihkan masa di dalam kelas untuk pembelajaran yang lebih interaktif dan kolaboratif, merupakan satu kemajuan pedagogi yang penting, terutamanya dalam pendidikan tinggi, lebih-lebih lagi semasa dan selepas pandemik. Walaupun terdapat banyak kajian mengenai keberkesanan pembelajaran terbalik dalam meningkatkan kecekapan pelajar Bahasa Inggeris sebagai Bahasa Kedua (ESL) dalam pelbagai bidang, hanya sedikit kajian yang secara khusus membincangkan peningkatan kemahiran penulisan dalam kalangan pelajar ESL praujian berkecekapan rendah melalui pembelajaran terbalik berasaskan genre produk. Oleh itu, kajian ini bertujuan untuk menilai kesan bilik darjah terbalik berasaskan genre produk terhadap prestasi penulisan akademik dalam kalangan pelajar ESL berkecekapan rendah, dan untuk membangunkan rangka kerja pembelajaran terbalik yang disesuaikan untuk pelajar ESL di peringkat praujian. Menggunakan reka bentuk eksperimen, kajian ini membandingkan pengajaran penulisan tradisional dalam kumpulan kawalan dengan kaedah bilik darjah terbalik dalam kumpulan eksperimen. Analisis kuantitatif menghasilkan dua penemuan utama: pertama, prestasi penulisan pelajar menunjukkan peningkatan ketara dari ujian pra hingga ujian pasca apabila menggunakan model bilik darjah terbalik; kedua, muncul korelasi positif antara pembelajaran terbalik berasaskan genre produk dan prestasi penulisan. Kajian ini memperkaya literatur dengan menyediakan bukti empirik bagaimana pembelajaran terbalik berasaskan genre produk dapat meningkatkan kemahiran penulisan dalam kalangan pelajar ESL berkecekapan rendah. Ia juga memperkenalkan rangka kerja penulisan terbalik yang baru yang disesuaikan khusus untuk pelajar ESL praujian, menawarkan pendidik sumber yang berharga untuk merancang aktiviti penulisan yang berkesan dalam konteks pendidikan ini.

Kata kunci: English sebagai bahasa kedua; bilik darjah terbalik; pelajar pra-universiti; pendekatan genre produk; prestasi penulisan

1.0 INTRODUCTION

In recent years, global demand for tertiary education has surged dramatically, propelled by advancements in information technology and the widespread adoption of online learning especially during and after pandemic. This shift has made mass education almost a universal access, accommodating a significant number of students in institutions that vary widely in funding and status, particularly evident in Asia Pacific nations where middle-income countries have achieved widespread access to higher education, while higher-income countries boast gross enrolment ratios exceeding 50% (Tight, 2023). This evolution marks a departure from elitist higher education paradigms that emphasized quality over quantity as shown in the increased global enrollment statistics (Viera do Nascimento, Roser-Chinchilla, & Mutize, 2020), reports on expanded online learning access (Peck, 2024), diversity initiatives (Veidemane, Kaiser, & Craciun, 2021), changes in university missions (Cappiali, 2023), global education trend studies (International Bank for Reconstruction and Development, 2017), and surveys reflecting changing attitudes toward education accessibility (Lister et al., 2022).

The massification of higher education presents variations in university admission standards, presenting challenges for ESL students entering English-medium universities who often struggle to meet the language demands of university-level coursework (Murray, 2016). Additionally, transitioning from secondary to university education involves distinct changes in curriculum, teaching methodologies, and learning approaches, placing ESL students at significant linguistic risk. They frequently encounter challenges in academic writing, such as organizing ideas into cohesive paragraphs, articulating personal viewpoints using appropriate academic language, crafting complex sentences, logically developing and supporting arguments, and effectively summarizing and paraphrasing information (Aldabbus & Almansouri, 2022). University-level academic writing necessitates analytical and critical thinking supported by evidence (Hardy & Clughen, 2012); however, low-proficiency ESL students often lack familiarity with diverse written forms, text genres, writing conventions, and subject-specific content knowledge (Al Badi, 2015; Elton, 2010; Yu & Liu, 2021). Given that most academic disciplines are taught in English, the expanding massification of tertiary education underscores the urgent need for low-proficiency ESL students to enhance their English language skills, particularly in writing.

Despite significant challenges in writing, many low-proficiency students today are increasingly turning to digital editing and writing tools for a quick fix. These digital authoring

tools provide support, help refine their work, and seemingly improve their language proficiency almost instantly. However, an over-reliance on AI-powered writing solutions, without engaging in deeper cognitive processing, may hinder their ability to effectively address language realistically (Alharbi, 2023). This situation highlights the urgent need for innovative approaches to language instruction that not only take advantage of technology but also emphasize the critical importance of mastering academic English and literacy skills. Therefore, it is essential to foster a balanced integration of digital tools and traditional learning methods, enabling educators to more effectively support students in developing the necessary skills for success.

Considering this need, there is a growing demand to explore how classroom approaches can be effectively adapted for ESL environments at the tertiary level, especially for low-proficiency ESL writers. One promising pedagogical strategy that has gained traction in recent years is the flipped classroom model. A promising pedagogical approach is the flipped classroom model, which has gained popularity in recent years. However, research should advance beyond assessing the effectiveness of flipped learning and to investigating effective adaptations of classroom approaches for low-proficiency ESL writers in tertiary education, with a focus on optimizing its outcomes. Furthermore, there is a lack of studies focused on effectively integrating flipped classroom models with traditional writing approaches and teaching methodologies to enhance the writing competence of low-proficiency ESL learners in pre-university settings (Kernagaran & Abdullah, 2022; Kumaraysan & Sulaiman, 2023). Therefore, this study aims to investigate the impact of a product-genre based flipped learning approach on the writing performance of low-proficiency ESL students and to develop a flipped learning framework tailored for teaching writing skills to ESL pre-university students.

2.0 LITERATURE REVIEW

2.1 ESL Writing: Approaches and Challenges

Writing poses particular challenges for ESL learners whose native languages differ significantly from English in terms of structure, expression, writing conventions, and cultural nuances (Akhtar et al., 2019; Saravanan, Palanisamy, & Aziz, 2021). Fundamentally, low-proficiency ESL writers encounter challenges primarily rooted in linguistic and rhetorical domains (Sasaki & Hirose, 1996). Typically, these learners allocate less time for planning (Pianko, 1979), exhibit inflexible planning strategies (Rose, 1980), and conduct superficial revisions focused predominantly on grammar rather than content (Flower & Hayes, 1981).

Their concerns center on linguistic specifics—vocabulary, language usage, and mechanics—often at the expense of developing effective writing strategies and behaviors characteristic of proficient writers (Zamel, 1984). When enrolled in composition courses, these learners expect instructors to identify and correct grammatical errors, diverting their focus from conceptualizing and expressing ideas (Raimes, 1985).

There have been various traditional approaches to teach composition, with notable methodologies including the product, process, and genre approaches commonly utilized by Malaysian English educators (Ghabool, Mariadass, & Kashef, 2012) and in ESL writing classrooms globally (Badger & White, 2000). Instead of emphasizing the teaching of grammar rules and modelling after exemplary texts, as seen in the product-based writing approach (Brown, Bransford, & Cocking, 1999), students are often limited to a narrow set of examples; thus, this approach can be restrictive. On the other hand, the process-based writing approach, which focuses on planning, drafting, and revising, poses challenges for ESL learners with low proficiency levels (Flower & Hayes, 1981). In contrast, genre-based pedagogy has emerged as a favoured alternative as it emphasizes the importance of textual and linguistic features that are essential for composing comprehensive texts (Matsushita, 2018).

However, these approaches exhibit pedagogical shortcomings (Atkinson, 2003; Bhowmik & Kim, 2022; De Larios, Murphy, & Marin, 2002; Myles, 2002), particularly evident when instructing low-proficiency ESL students across various proficiency levels. despite their individual merits. Effective instruction for ESL low-proficiency pre-university learners necessitates integrating language knowledge (as emphasized in product and genre approaches), contextual understanding of writing (as highlighted in genre approaches), language use skills, and the cultivation of learners' potential (as advocated by process approaches). Moreover, scaffolding by teachers is crucial in guiding low-proficiency ESL writers toward acquiring advanced language and writing skills (Gibbons, 2002). This entails focusing on content quality, essay structure coherence, and clarity of expression (Storch & Tapper, 1997), given these learners' limited ability to independently select rhetorically and linguistically appropriate language in their writing (Bereiter & Scardamalia, 2013; Flower & Hayes, 1981; Kellogg, 1996). Research by Chaleila and Khalaila (2020) on Arab-Israeli tertiary students and Piamsai (2020) on non-proficient writers underscore the benefits of explicit instruction and detailed scaffolding in significantly improving writing performance. Both studies highlight the necessity of ample practice for sustained writing improvement.

2.2 Flipped Classroom

Research interest in the flipped classroom, a specific type of blended learning where instructional content is delivered online, and class time is used for interactive activities, has proliferated rapidly, affirming its significant impact on teaching and learning (Lin et al., 2018; Strelan, Osborn & Palmer, 2020; Turan & Goktas, 2016). This educational approach entails students acquiring knowledge outside the classroom through video lectures, subsequently engaging in activities that foster higher-order thinking and problem-solving skills, making it increasingly pivotal in higher education (Galindo-Dominguez, 2021; Gillispie, 2016; Jensen, Kummer, & Godoy, 2015; McLean et al., 2016). Flipped classrooms are particularly advantageous for low-proficiency ESL pre-university students who often face challenges in traditional classroom environments characterized by limited time for practice, discussion, and higher-order cognitive activities. In a flipped classroom setting, class time is strategically dedicated to these activities, allowing students to engage with learning materials at their own pace while receiving individualized support (Jiang et al., 2022; Vitta & Al-Hoorie, 2023).

Several theories and concepts underpin the flipped classroom approach. One of the key theories is Constructivism (Pass, 2004) which emphasizes the role of active learning where students construct their own understanding and knowledge of the world through experiences and reflecting on those experiences. In a flipped classroom, students first encounter new content at home (often through videos) and then engage in active problem-solving and application during class time. Active Learning, theorized by John Dewey (Williams, 2017) is another concept in flipped classroom that involves engaging students in activities that require them to think critically and apply what they have learned. The flipped classroom model supports active learning by using in-class time for discussions, problem-solving, and collaborative projects, combatting passive learning environments prevalent in higher education settings (Al-Marouf & Al-Emran, 2021). Traditional lecture formats often limit instructor-student interactions, fostering passive learning behaviours (Zappe et al., 2009). Conversely, flipping instructional content in these lectures has shown to enhance interaction between instructors and students significantly. This approach reallocates in-class time towards practice, discussion, and higher-order thinking tasks, thereby enriching student learning experiences and fostering improved cognitive skills (Latorre-Coscolluela et al., 2021; Lin et al., 2018; Long, Cummins, & Waugh, 2017; Shih & Tsai, 2017).

Flipped classroom based on the theory of Cognitivism (Chien, Chen & Liao 2019) focuses on the internal processes of learning, including how we process information and how

our understanding. It leverages cognitive principles by allowing students to learn new content at their own pace and then apply their understanding in a supportive, interactive environment during class. Grounded also in Bloom's Revised Taxonomy, and Cognitive Apprenticeship (Erbil, 2020), the flipped classroom model transforms the role of instructors into facilitators who operate within students' Zone of Proximal Development (ZPD) (Vygotsky & Cole, 1978). This pedagogical shift involves scaffolding and facilitating learning, capitalizing on learners' conceptual frameworks and interpretations (Taber, 2012). Scaffolding, a temporary support mechanism provided by instructors or more knowledgeable peers, underpins the flipped classroom's enhancement of collaborative learning strategies. Here, learners actively construct knowledge through interactions with instructors and peers (Erbil, 2020). Moreover, the approach aligns with Bloom's Revised Taxonomy, which categorizes cognitive learning into six domains (Bloom, 1956; Conklin, 2005). Lower cognitive domains such as remembering, understanding, and applying involve factual recall, interpretation, and application in new contexts, while higher domains like analyzing, evaluating, and creating necessitate comparison, judgment, and innovative synthesis (Lin et al., 2018). In the flipped classroom, basic cognitive tasks are assigned for independent study, leaving classroom time for more intricate cognitive engagements (Lin et al., 2018). For ESL students, flipped classroom encourages modeling of thought processes by teachers and explicit demonstrations of how to articulate ideas in writing (Ritchhart & Perkins, 2008). According to Vygotsky (Vygotsky & Cole, 1978), the Zone of Proximal Development (ZPD) illustrates the gap between a learner's independent and assisted capabilities, emphasizing the role of expert guidance in fostering cognitive development. In a flipped classroom, teachers can provide targeted support and scaffolding during class time, helping students bridge the gap between what they can do alone and with the help of effective teaching which involves making thinking visible through verbal, written, or visual expression, thereby deepening student understanding (Ritchhart & Perkins, 2008). These theories collectively support the flipped classroom model by emphasizing the importance of active, student-centered learning and allowing for more effective use of classroom time. Instead of prioritizing grammatical accuracy and final product outcomes over fostering meaningful teacher-student interactions and providing essential feedback and scaffolding as in many pre-university writing programmes (Kim & Kim, 2005), an effective instructional approach for enhancing writing skills among low-proficiency ESL learners should be adaptable and conducive to diverse writing contexts. These learners benefit from extended practice opportunities, development of critical thinking skills, and structured approaches to organizing their writing (Firkins, Forey, & Sengupta, 2007).

However, limited research exists on how writing approaches can be integrated effectively within a flipped classroom environment for intensive writing instruction for pre-university ESL learners (Kernagaran & Abdullah, 2022; Roohani & Rad, 2022). Therefore, reconfiguring existing writing approaches and developing a practical flipped classroom framework integrating technology could effectively enhance out-of-classroom learning experiences, enabling more focused in-class practice, guidance, and feedback for ESL low-proficiency students, thereby better preparing them for diverse writing tasks they will encounter in both academic and professional contexts.

3.0 MATERIALS AND METHODS

The current study employed quantitative methodologies to evaluate the learning outcomes of an experimental group against those of a control group (Marshall & Rossman, 2014). Quantitative data encompassed pre-test and post-test findings gathered from both the experimental and control groups.

3.1 The Participants

Seventy-four ESL students with low proficiency levels participated in the study, all enrolled in the Intensive English Programme at an offshore campus of an Australian university. These students hailed from various non-English speaking countries, including China, Indonesia, Korea, Yemen, Bangladesh, Sri Lanka, Egypt, Kazakhstan, and Malaysia. The participants were divided into two main groups: an experimental group and a control group. Each group was further subdivided according to their academic term. The experimental group followed an identical curriculum and structure across all terms. Conversely, the control group underwent the same curriculum and used identical materials as the experimental group, but all instruction occurred in traditional classroom settings.

3.2 Research Hypothesis and Design

The study aimed to test the hypothesis that low-proficiency ESL students would demonstrate improved writing skills in writing process essays following flipped classroom training. The overarching research question guiding this hypothesis was 'Could flipped classroom training enhance the writing skills of second language students?'

The study was conducted in three distinct phases. Phase 1 involved a pre-test to assess participants' existing knowledge of essay writing and determine their proficiency level before the experiment. Participants were given a task to describe a diagram in 150 words. Phase 2 consisted of six sessions of flipped classroom training, while Phase 3 included a post-test to evaluate the impact of the training. Detailed descriptions of the training sessions and post-experiment activities are provided in subsequent sections.

The study comprised a total of eight sessions, with two sessions dedicated to pre-test and post-test assessments, and six sessions allocated for flipped classroom training. Each flipped classroom session spanned over two hours and was conducted over a period of three weeks. The content delivered during training sessions was standardized across all four participant groups. Prior to the experiment, 74 participants were randomly assigned to two main groups: an experimental group and a control group. In each experimental session, students viewed a 10–20-minute PowerPoint Audio slide lecture on task response, grammar, and cohesion for two types of writing before class. They engaged in group or pair discussions and completed individual writing tasks during class.

At the outset of the initial training session, students were asked to recall their previous writing experiences, both in-class and outside of class settings. Feedback on the pre-test performance was provided, with the researcher reviewing the questions and expected responses with the students. A brief overview of the session's agenda was presented, followed by a detailed explanation of the flipped-genre classroom writing approach. Prior to the first training session, students viewed a video lecture outlining the structure of a short discussion essay. The format of the post-test mirrored that of the pre-test, where students were required to discuss both perspectives and express their opinion within the essay format. Students were allotted 50 minutes to complete a process essay.

3.3 Scoring Rubric

Students' writing performance was evaluated using a scoring rubric adapted from Hua (2012). The rubric assigned varying levels of marks based on the quality of students' responses to the writing prompts. The researcher, with over 20 years of experience in teaching English writing, marked the students' work and all graded scripts were subsequently reviewed by the programme convener and supervisors. This collaborative review process

ensured consistency in feedback and standards, fostering a deeper understanding of student progress and areas for improvement. A full mark of 1.0 was awarded for excellent responses demonstrating cohesive writing and grammatical accuracy. Responses that were mostly accurate with minor errors received a score of 0.75. Answers that were partially correct earned a score of 0.5, while largely inaccurate or irrelevant answers were graded at 0.25. Responses that did not address the question or exhibited poor grammar received a score of zero.

4.0 RESULTS

A comparative analysis was conducted to assess the impact of training and instructional structure on writing performance between control and experimental groups. The study compared the results of both groups during their experimental stages, specifically the pre-tests and post-tests.

4.1 Impact of Flipped Writing Classroom on Students Performance

The null hypothesis posited that flipped writing training would not affect writing performance in essay writing. Thirty-eight low-proficiency ESL participants took part in both the pre-test and post-test sessions to write process essays. The number of students in the control group was 36, while the experimental group consisted of 38 students.

Before presenting the writing performance results of participants from both groups, a test of homogeneity—specifically a normality test—was conducted to assess whether the pre-test data in both experimental groups were normally distributed. The results are summarized in Table 1. According to Brown (1997), Skewness (SES) and Kurtosis (SEK) measure the asymmetry and peakedness of a distribution. Ideally, in a perfectly normal distribution, both Skewness and Kurtosis would be zero. However, in real-world data, these values can be positive or negative. George and Mallery (2019) suggest that if SES and SEK values fall between -2 and 2, the distribution of the population is considered normal and acceptable.

Table 1. Skewness and Kurtosis of process essay pre-test based on control and experimental group

Group	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Experimental Group	38	0.622	0.393	0.645	0.768
Control Group	36	-0.447	0.383	-0.564	0.750

Table 1 indicates that all SES and SEK values fall within the acceptable range (-2 to 2), suggesting that the data from the pre-tests on discussion essays and the process essays in both the control and experimental groups are normally distributed. To assess independence, residual plots were employed to examine internal consistency between the control and experimental groups (Hahs-Vaughn & Lomax, 2013). Figure 1 illustrates that the residual values for both groups confirm the normal distribution of the data.

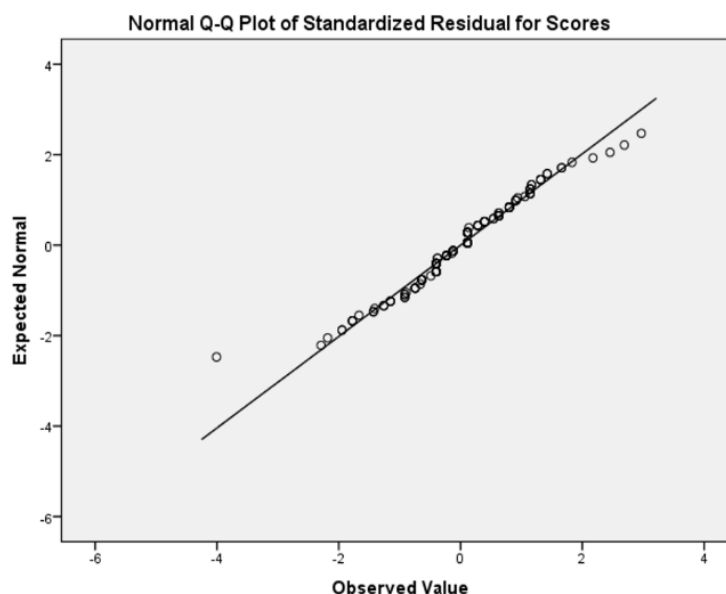


Figure 1. The plot residuals of the experimental and control groups

Figure 1 presents the results of the ANCOVA (Analysis of Covariance) comparing pre-test and post-test scores between the experimental group (which received product-genre based flipped learning training) and the control group (without such training). It also includes the original means and standard deviations of the pre-test and post-test scores.

Following the product-genre based flipped learning training, there was a notable improvement in the mean scores for process essay writing among low proficiency ESL

students (Mean = 7.6684, SD = 2.24441), compared to their scores before the training (Mean = 2.4583, SD = 1.72534). This suggests that students who underwent product-genre based flipped learning achieved significantly better learning outcomes than those who did not receive this training. Specifically, the difference in mean scores for process essay between pre-test and post-test in the experimental group was statistically significant ($t(37) = -21.062$, $p < 0.05$, $\eta^2 = 0.302$), indicating a large effect size ($\eta^2 = 0.302$), highlighting the effectiveness of the proposed learning approach.

Furthermore, the significant F-value ($F(1,72) = 124.34$, $p < .001$) underscores that the learning outcomes between the experimental and control groups differed significantly after controlling for pre-test scores as a covariate. This confirms that the product-genre based flipped learning approach yielded superior results compared to traditional classroom learning in enhancing the process writing skills of low-proficiency pre-university ESL students, as evidenced by students scoring better, thus indicating that they managed to achieve the intended learning outcomes.

Table 2. Paired sample t-test process essay in experimental group

	N	Mean	SD	Std. error	F	η^2
Experimental	38	7.6684	2.24441	0.36409	124.34***	0.302
Control	36	2.4583	1.72534	0.28756		

*** $p < .001$

Table 2 illustrates the distribution of writing scores for low-proficiency ESL participants who completed process essays during both the pre-test and post-test phases in the experimental groups.

Figure 2 shows the writing score distribution by participants who wrote process essay in both experimental stages. Another paired sample t-test (Table 3 below) indicates a significant difference, $t(37) = -21.062$, $p < 0.05$. The 95% confidence interval confirms the significant improvement between pre- and post-test scores in writing process essays, leading to the rejection of the null hypothesis. As hypothesized, the writing performance of low-proficiency ESL participants showed significant enhancement following the implementation of flipped writing training.

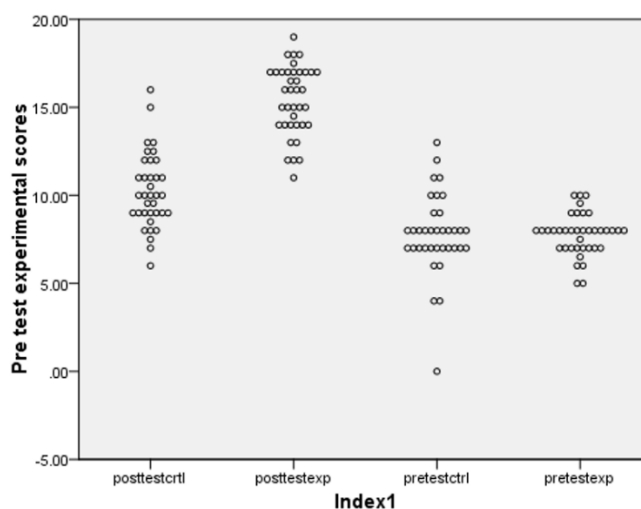


Figure 2. A dot plot graph visualising the writing score distribution by participants who wrote process essay in both experimental stages

Table 3. A paired sample t-test showing the confidence level of the difference

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post test experimental scores - Pre test experimental scores	7.66842	2.24441	.36409	6.93070	8.40614	21.062	37	.000
Pair 2	post test control scores - pre test control scores	2.45833	1.72534	.28756	1.87456	3.04210	8.549	35	.000

Thus, the findings affirm the hypothesis of this study. The writing performance of low-proficiency ESL participants in the experimental group was notably enhanced by the flipped writing training. Therefore, it can be concluded that the flipped writing training significantly improved the writing performance of low-proficiency ESL participants.

5.0 DISCUSSION

5.1 Impact of the Flipped Writing Classroom on Low-Proficiency ESL Students at the Pre-University Level

This study examines the effects of the flipped classroom model on the academic writing performance of low-proficiency ESL students at the pre-university level and proposes a customized flipped learning framework for these students. The findings reveal a significant enhancement in writing performance among students who participated in the flipped

classroom intervention compared to those who did not. Specifically, participants in the flipped classroom exhibited marked improvements in their discussion and process essays. These results are noteworthy, as the experimental group, initially characterized by low proficiency in writing, showed substantial progress. This suggests that the flipped writing classroom model is effective in supporting ESL students who face challenges with academic writing. The evidence indicates that this model is particularly beneficial for teaching discussion and process essays to students with lower proficiency, as it leads to enhanced writing performance.

Several factors contribute to the observed positive outcomes of the flipped writing approach. First, the integration of flipped writing instruction with a product-genre approach notably improved both Lower Order Thinking Skills (LOTS) and Higher Order Thinking Skills (HOTS) for students, both inside and outside the classroom. Students successfully defined a thesis statement in their own words and provided an example for a discussion essay on climate change (LOTS task). They also identified strengths and weaknesses in their peers' writing by articulating their opinions and suggesting improvements (HOTS task). This suggests that the consistent application of these strategies can lead to effective teaching and learning outcomes. The flipped writing framework developed in this study appears to be well-suited for novice ESL writers in pre-university contexts. By providing students with additional time to understand genre-specific concepts and learn rhetorical and linguistic structures through pre-class videos, the flipped model effectively enhanced their writing skills. This improvement was evident compared to students who did not receive flipped classroom training. Additionally, the flipped classroom model benefits instructors by extending classroom time, allowing them to focus on high-order thinking skills (HOTS) and address individual writing challenges without the limitations of traditional classroom settings. For instance, they can help students create detailed outlines for discussion essays and implement peer review sessions, fostering collaboration and constructive feedback while encouraging reflection on their writing processes. These findings are consistent with previous research (Abedi, Keshmirshekan, & Namaziandost, 2019; Fathi & Rahimi, 2022; Güvenç, 2018), which also highlights improved writing performance and positive attitudes towards the flipped approach.

Second, the flipped writing classroom provided low-proficiency ESL learners with increased flexibility and autonomy over their learning process. Learner autonomy is essential for motivation (Cotterall, 2000). When students, especially those with low proficiency, feel a

sense of ownership and control over their learning, they are more motivated to improve their writing skills. The flipped approach offered students more opportunities to prepare before class, additional time to process learning materials between lessons, increased interaction with peers, and timely feedback from instructors, all of which contributed to a deeper understanding of the subject matter. This aligns with findings from other studies (Altas & Mede, 2021; Jia, 2020; Yang & Chen, 2020), which emphasize that the flipped classroom optimizes learning time.

The flipped approach also allowed teachers to provide more individualized support outside the classroom due to the accessibility of learning materials. This enabled instructors to focus on scaffolding, practice, and engaging students in deeper discussions during class time. Rather than merely transferring information, the classroom became a space for exploring new concepts and ideas in greater depth, which is particularly beneficial for low-proficiency learners who may struggle with initial understanding. Students gained greater control over their learning pace and depth, boosting their self-confidence—an important factor for success (Çakmak, Gündüz, & Emstad, 2019). Additionally, the flipped writing classroom meets contemporary learning needs, as students today expect fast-paced, technology-enhanced learning environments (Webb & Doman, 2020). Consequently, educators are encouraged to innovate their teaching strategies and leverage technology effectively (Huang & Hong, 2016; Logan, 2015; Roehl, Reddy, & Shannon, 2013).

5.2 Flipped Writing Framework

The study's key findings are as follows: (i) participants' writing performance improved significantly in the post-test compared to the pre-test; (ii) a confirmed relationship exists between the flipped writing training and improved writing performance; and (iii) while both control and experimental groups showed improvement, the experimental group demonstrated more substantial gains.

Based on these findings, a Flipped Writing Framework was developed, Figure 3. This framework illustrates a cyclical learning process comprising two main stages: (1) Outside the classroom to enhance Lower Order Thinking Skills (LOTS), where students need to recall the essay's structure and key terms, comprehend its purpose and distinctions from other essay types, and apply skills to select a topic, outline arguments, and draft an introduction; and (2) Inside the classroom to develop Higher Order Thinking Skills (HOTS), which involves analyzing different viewpoints and their supporting evidence, synthesizing information from

various sources to create a balanced perspective, and evaluating the effectiveness of arguments—all of which enhance their critical thinking and writing skills.

The cyclical model consists of two primary stages. Stage One focuses on developing LOTS outside the classroom, while Stage Two aims to enhance HOTS within the classroom. These stages, along with their sub-phases, guide writing instructors in assisting low-proficiency ESL students in improving their academic writing skills.

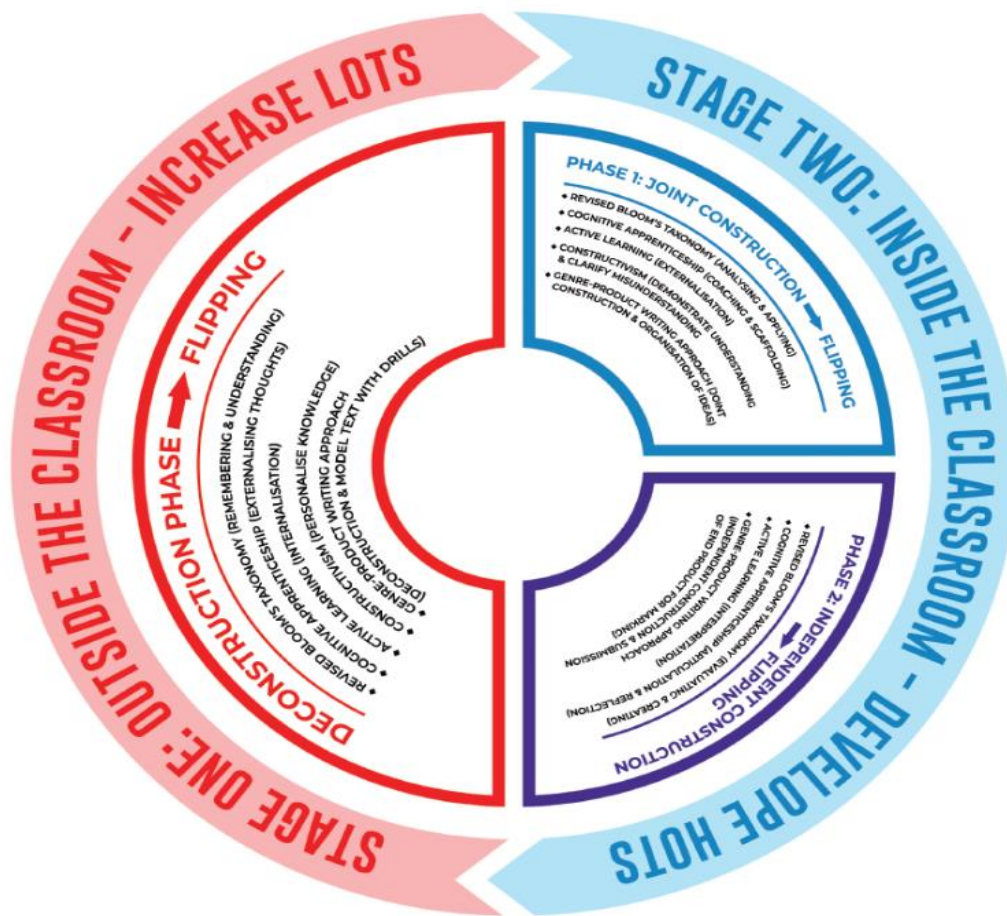


Figure 3. Proposed flipped writing framework for low-proficiency ESL students

The incorporation of a product-genre-based flipped learning approach has led to significant improvements in the writing performance of low-proficiency ESL students. This enhancement is attributed to increased scaffolding, motivation, and autonomy resulting from the flipped model. The additional time provided by the flipped classroom enables teachers to address individual writing challenges, develop HOTS, and provide immediate feedback, fostering trust and creating more effective teachable moments. With more time to engage with learning materials, students are better prepared for more complex tasks during class.

The study developed a Flipped Writing Framework based on the flipped classroom concept, integrating learning theories such as Bloom's Taxonomy and Constructivism, along with Cognitive Apprenticeship and Active Learning. This framework is designed to help low-proficiency ESL learners achieve higher-order thinking skills through a structured approach from LOTS to HOTS. The effectiveness of the framework depends not only on the use of video materials or teaching techniques but on the dynamic interaction between teachers and students within the classroom.

The findings underscore that successful implementation of the flipped classroom model relies on the synergy between teachers and students. Teachers must provide targeted support and scaffolding to address students' linguistic, cognitive, and emotional needs, thereby enhancing motivation, engagement, and self-efficacy. Effective teacher-student relationships play a crucial role in improving writing performance. Therefore, educators must thoroughly understand their students' needs and provide timely and appropriate guidance to maximize the benefits of the flipped classroom approach.

The substantial improvement in writing observed in the post-test for students who participated in the flipped classroom training led to the identification of three critical phases in the flipped writing instruction model:

Deconstruction Phase: This phase is grounded in Revised Bloom's Taxonomy (Remembering & Understanding), Cognitive Apprenticeship (Externalizing Thoughts), Active Learning (Internalization), Constructivism (Personalized Knowledge), and the Genre-Product Writing Approach (Deconstruction & Model Text with Drills). In this phase, instructors evaluate and select relevant genres and linguistic structures, providing detailed analysis and explanation through videos. Students then revise their prior knowledge and internalize new information by engaging with these instructional videos.

Joint Construction Phase: This phase incorporates the same theoretical frameworks but with a different focus: Revised Bloom's Taxonomy (Analyzing & Applying), Cognitive Apprenticeship (Coaching & Scaffolding), Active Learning (Externalization), Constructivism (Demonstrate Understanding & Clarify Misunderstanding), and the Genre-Product Writing Approach (Joint Construction & Organization of Ideas). During this phase, instructors demonstrate how to process, organize, and expand ideas, encourage collaborative writing activities, and provide immediate feedback and scaffolding.

Independent Construction Phase: This phase focuses on Revised Bloom's Taxonomy (Evaluating & Creating), Cognitive Apprenticeship (Articulation & Reflection), Active Learning (Deep Learning & Engagement), Constructivism (Interpretation), and the Genre-Product Writing Approach (Independent Construction & Submission). In this phase, students engage in independent writing practice, applying their understanding and reflection to create a final product.

The central concept of this framework is not to develop a new writing instruction strategy but to integrate video materials into the flipped learning model, reflecting recent research trends. The cyclical pattern of Deconstruction, Joint Construction, and Independent Construction is designed to address the specific needs of low-proficiency students, emphasizing the importance of instructor demonstration, scaffolding, and cognitive development.

Overall, the Flipped Writing Framework incorporates the genre-product writing approach within the flipped learning model, utilizing Revised Bloom's Taxonomy, Cognitive Apprenticeship, Constructivism, and Active Learning to enhance LOTS and HOTS and improve writing performance for low-proficiency ESL students.

6.0 CONCLUSION AND IMPLICATIONS

The incorporation of a product-genre-based flipped learning approach has led to significant improvements in the writing performance of low-proficiency ESL students. This enhancement is attributed to increased scaffolding, motivation, and autonomy resulting from the flipped model. The additional time provided by the flipped classroom enables teachers to address individual writing challenges, develop HOTS, and provide immediate feedback, fostering trust and creating more effective teachable moments. With more time to engage with learning materials, students are better prepared for more complex tasks during class.

The study developed a Flipped Writing Framework based on the flipped classroom concept, integrating learning theories such as Bloom's Taxonomy and Constructivism, along with Cognitive Apprenticeship and Active Learning. This framework is designed to help low-proficiency ESL learners achieve higher-order thinking skills through a structured approach from LOTS to HOTS. The effectiveness of the framework depends not only on the use of video materials or teaching techniques but on the dynamic interaction between teachers and students within the classroom.

The findings underscore that successful implementation of the flipped classroom model relies on the synergy between teachers and students. Teachers must provide targeted support and scaffolding to address students' linguistic, cognitive, and emotional needs, thereby enhancing motivation, engagement, and self-efficacy. Effective teacher-student relationships play a crucial role in improving writing performance. Therefore, educators must thoroughly understand their students' needs and provide timely and appropriate guidance to maximize the benefits of the flipped classroom approach.

7.0 REFERENCES

- Abedi, P., Keshmirshakan, M. H., & Namaziandost, E. (2019). The comparative effect of flipped classroom instruction versus traditional instruction on Iranian intermediate EFL learners' English composition writing. *Journal of Applied Linguistics and Language Research*, 6(4), 43-56.
- Akhtar, R., Hassan, H., Saidalvi, A., & Hussain, S. (2019). A systematic review of the challenges and solutions of ESL students' academic writing. *International Journal of Engineering and Advanced Technology*, 8(5), 1169-1171.
- Al-Marroof, R. A., & Al-Emran, M. (2021). Research trends in flipped classroom: A systematic review. *Recent Advances in Intelligent Systems and Smart Applications*, 253-275.
- Al-Badi, I. A. H. (2015). Academic writing difficulties of ESL learners. In the 2015 WEI international academic conference proceedings (pp.66-78). Retrieved from <http://www.westeastinstitute.com/wp-content/uploads/2015/02/lbtisam-Ali-Hassan-Al-Badi-full-Paper.pdf>.
- Aldabbus, S., & Almansouri, E. (2022). Academic writing difficulties encountered by university EFL learners. *British Journal of English Linguistics*, 10(3), 1-11.
- Alharbi, W. (2023). AI in the Foreign language classroom: A pedagogical overview of automated writing assistance tools. *Education Research International*, 2023, 1–15. <https://doi.org/10.1155/2023/4253331>.
- Altas, E. A., & Mede, E. (2021). The impact of flipped classroom approach on the writing achievement and self-regulated learning of pre-service English teachers. *Turkish Online Journal of Distance Education*, 22(1), 66-88.
- Atkinson, D. (2003). L2 writing in the post-process era: Introduction. *Journal of Second Language Writing*, 12(1), 3-15.
- Badger, R & White, G. (2000). A process genre approach to teaching writing. *ELT Journal*, 54, 153-160. <http://dx.doi.org/10.1093/elt/54.2.153>.
- International Bank for Reconstruction and Development (2017). *Higher education for development: An evaluation of the world bank group's support*. International Bank for Reconstruction and Development. Retrieved from <https://documents1.worldbank.org/curated/en/729101493052924041/pdf/Higher-education-for-development-an-evaluation-of-the-World-Bank-Group-s-support.pdf>.

- Bereiter C. & Scardamalia M. (2013). *The psychology of written composition*. Hillsdale, NJ: Erlbaum.
- Bhowmik, S., & Kim, M. (2022). ESL writing instruction in K-12 settings: Pedagogical approaches and classroom techniques. *Language and Literacy*, 24(2), 174-197.
- Bloom, B. S. (1956). *Taxonomy of educational objectives: The classification of educational goals*. London: Longman.
- Brown, A., Bransford, J., and Cocking, R. (1999). *How people learn: Brain, mind experience and school*. Washington, DC: National Academy Press
- Brown, J. D. (1997, April). Skewness and kurtosis. *Shiken: JALT Testing & Evaluation SIG Newsletter*, 1(1), 20-23.
- Çakmak, M., Gündüz, M., & Emstad, A. B. (2019). Challenging moments of novice teachers: survival strategies developed through experiences. *Cambridge Journal of Education*, 49(2), 147-162.
- Cappiali, T. M. (2023). A paradigm shift for a more inclusive, equal, and just academia? Towards a transformative-emancipatory pedagogy. *Education Sciences*, 13(9), 876, 3-4.
- Chaleila, W., & Khalaila, B. (2020). The effect of comprehensive explicit instruction approach on Arab EFLstudents' academic writing performance. *English Language Teaching*, 13(5), 80-93.
- Chien, C. F., Chen, G. Y. H., & Liao, C. J. (2019). Designing a connectivist flipped classroom platform using unified modeling language. *International Journal of Online Pedagogy and Course Design*, 9(1), 1-18.
- Conklin, J. (2005). Review of *a taxonomy for learning, teaching, and assessing: A revision of bloom's taxonomy of educational objectives. Complete edition*. In Anderson, L. W., Krathwohl, D., Airasian P., Cruikshank, K. A., Mayer, R. E., Pintrich, P., Raths, J. & Wittrock, M. C. *Educational Horizons*, 83(3), 154–159. <http://www.jstor.org/stable/42926529>.
- Cotterall, S. (2000). Promoting learner autonomy through the curriculum: Principles for designing language courses. *ELT Journal*, 54(2), 109-117.
- De Larios, J.R., Murphy, L., Marín, J. (2002). A critical examination of L2 writing process research. In: Ransdell, S., Barbier, ML. (eds) *New directions for research in L2 writing. Studies in Writing*, 11, 11 - 47. Springer, Dordrecht. Retrieved from https://doi.org/10.1007/978-94-010-0363-6_2.
- do Nascimento, D. V., Mutize, T., & Chinchilla, J. F. R. (2022). Universal access to higher education: Trends, barriers and drivers. *Revista Educación Superior Y Sociedad (ESS)*, 34(1), 642-667.
- Elton, L. (2010). Academic writing and tacit knowledge. *Teaching in Higher Education*, 15(2), 151-160.
- Erbil, D. G. (2020). A review of flipped classroom and cooperative learning method within the context of Vygotsky theory. *Frontiers in Psychology*, 11, 1157.

- Fathi, J., & Rahimi, M. (2022). Examining the impact of flipped classroom on writing complexity, accuracy, and fluency: A case of EFL students. *Computer Assisted Language Learning*, 35(7), 1668-1706.
- Firkins, A., Forey, G., & Sengupta, S. (2007). Teaching writing to low proficiency EFL students. *ELT Journal*, 61(4), 341-352.
- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition & Communication*, 32(4), 365-387.
- Galindo-Dominguez, H. (2021). Flipped classroom in the educational system. *Educational Technology & Society*, 24(3), 44-60.
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference (16th Ed.)*. Routledge.
- Ghabool, N., Mariadass, M. E., & Kashef, S. H. (2012). Investigating Malaysian ESL students' writing problems on conventions, punctuation, and language use at secondary school level. *Journal of Studies in Education*, 2(3), 130-143.
- Gibbons, P. (2002). *Scaffolding language, scaffolding learning: Teaching English language learners in the mainstream classroom*. Heinemann Educational Books.
- Gillispie, V. (2016). Using the flipped classroom to bridge the gap to generation Y. *Ochsner Journal*, 16(1), 32-36.
- Güvenç, G. (2018). The flipped classroom approach in teaching writing: An action research. *International Journal of Social Sciences and Education Research*, 4(3), 421-432.
- Hahs-Vaughn, D. L., & Lomax, R. G. (2013). *Statistical concepts: a second course*. Routledge.
- Hardy, C., & Clughen, L. (2012). *Writing in the disciplines: Building supportive cultures for student writing in UK higher education*. Emerald Group Publishing.
- Hua, W. (2012). *The influence of comprehension strategies on hypertext reading by students from non-English speaking backgrounds* [Unpublished doctoral dissertation], The Swinburne University of Technology. Retrieved from file:///C:/Users/USER/Downloads/Documents/Hua% 20Wang% 20Thesis. pdf.
- Huang, Y.-N., & Hong, Z.-R. (2016). The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension. *Educational Technology Research and Development*, 64, 175-193.
- Jensen, J. L., Kummer, T. A., & Godoy, P. D. d. M. (2015). Improvements from a flipped classroom may simply be the fruits of active learning. *CBE—Life Sciences Education*, 14(1), ar5, 1-12.
- Jiang, M. Y.-c., Jong, M. S.-y., Lau, W. W.-f., Chai, C.-s., Liu, K. S.-x., & Park, M. (2022). A scoping review on flipped classroom approach in language education: Challenges, implications and an interaction model. *Computer Assisted Language Learning*, 35(5-6), 1218-1249.

- Kellogg, R. T. (1996). A model of working memory in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences, and applications*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc. 57-71.
- Kernagaran, V., & Abdullah, A. (2022). A systematic literature review of flipped learning in English as second language (ESL) context. *International Journal of Instruction*, 15(2), 793-814.
- Kim, Y., & Kim, J. (2005). Teaching Korean university writing class. *Asian EFL*, 7(2), 1-15.
- Kumaraysan, L. S., & Sulaiman, N. A. (2023). Flipped classroom for writing skills: Views from pre-university students' lens towards effective writing. *International Journal of Academic Research in Progressive Education and Development*, 12(3).
- Latorre-Coscolluela, C., Suárez, C., Quiroga, S., Sobradie-Sierra, N., Lozano-Blasco, R., & Rodríguez-Martínez, A. (2021). Flipped Classroom model before and during COVID-19: Using technology to develop 21st century skills. *Interactive Technology and Smart Education*, 18(2), 189-204.
- Lin, C.-J., Hwang, G.-J., Fu, Q.-K., & Chen, J.-F. (2018). A flipped contextual game-based learning approach to enhancing EFL students' English business writing performance and reflective behaviors. *Journal of Educational Technology & Society*, 21(3), 117-131.
- Lister, K., Pearson, V. K., Coughlan, T., & Tessarolo, F. (2022). Inclusion in uncertain times: Changes in practices, perceptions, and attitudes around accessibility and inclusive practice in higher education. *Education Sciences*, 12(8), 571.
- Logan, B. (2015). Deep exploration of the flipped classroom before implementing. *Journal of Instructional Pedagogies*, 16(1), 1-12.
- Long, T., Cummins, J., & Waugh, M. (2017). Use of the flipped classroom instructional model in higher education: Instructors' perspectives. *Journal of computing in higher education*, 29, 179-200.
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications.
- Matsushita, K. (2018). An invitation to deep active learning. *Deep Active Learning: Toward Greater Depth in University Education*, 15-33.
- McLean, S., Attardi, S. M., Faden, L., & Goldszmidt, M. (2016). Flipped classrooms and student learning: not just surface gains. *Advances in Physiology Education*, 40(1), 47-55.
- Jia, Y. (2020). Review of innovations in flipping the language classroom: Theories and practices by Mehring, J., & Leis, A (Eds). *Language Learning & Technology*, 24(1), 58-61
- Murray, N. (2016). *Standards of English in higher education: Issues, challenges and strategies*. Cambridge University Press.
- Myles, J. (2002). Second language writing and research: The writing process and error analysis in student texts. *Teaching English as a Second or Foreign Language*, 6(2), 1-19.

- Pass, S. (2004). *Parallel paths to constructivism: Jean Piaget and Lev Vygotsky*. Information Age Publishing.
- Peck., D. (2024). *Online learning statistics: the ultimate list in 2024*. Retrieved from <https://www.devlinpeck.com/content/online-learning-statistics>.
- Piamsai, C. (2020). The effect of scaffolding on non-proficient EFL learners' performance in an academic writing class. *Language Education and Acquisition Research Network*, 13(2), 288-305.
- Pianko, S. (1979). A description of the composing processes of college freshman writers. *Research in the Teaching of English*, 13(1), 5-22.
- Raimes, A. (1985). What unskilled ESL students do as they write: A classroom study of composing. *TESOL Quarterly*, 19(2), 229-258.
- Ritchhart, R. & Perkins, D. (2008). Making thinking visible. *Educational Leadership: Journal of The Department Of Supervision And Curriculum Development*, 65(5), 57-61.
- Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: An opportunity to engage millennial students through active learning strategies. *Journal of Family and Consumer Sciences*, 105(2), 44.
- Roohani, A., & Rad, H. S. (2022). Effectiveness of hybrid-flipped classroom in improving EFL learners' argumentative writing skill. *TEFLIN Journal: A Publication on the Teaching & Learning of English*, 33(2), 349–366. <https://doi.org/10.15639/teflinjournal.v33i2/349-366>
- Rose, M. (1980). Rigid rules, inflexible plans, and the stifling of language: A cognitivist analysis of writer's block. *College Composition & Communication*, 31(4), 389-401.
- Saravanan, A., Palanisamy, L., & Aziz, A. A. (2021). Systematic review: Challenges in teaching writing skills for upper secondary in ESL classrooms and suggestions to overcome them. *Malaysian Journal of Social Sciences and Humanities*, 6(4), 262-275.
- Sasaki, M., & Hirose, K. (1996). Explanatory variables for EFL students' expository writing. *Language Learning*, 46(1), 137-168.
- Shih, W.-L., & Tsai, C.-Y. (2017). Students' perception of a flipped classroom approach to facilitating online project-based learning in marketing research courses. *Australasian Journal of Educational Technology*, 33(5), 33-34. <https://doi.org/10.14742/ajet.2884>.
- Storch, N., & Tapper, J. (1997). Student annotations: What NNS and NS university students say about their own writing. *Journal of Second Language Writing*, 6(3), 245-264.
- Strelan, P., Osborn, A., & Palmer, E. (2020). The flipped classroom: A meta-analysis of effects on student performance across disciplines and education levels. *Educational Research Review*, 30, 100314.
- Taber, K. S. (2012). Constructivism as educational theory: Contingency in learning, and optimally guided instruction. In J. Hassaskhah (Ed.), *Educational Theory*. 39-61. Nova.

- Tight, M. (2023). From Elite Higher Education to Massification. *The Oxford Handbook of Higher Education in the Asia-Pacific Region*, 47.
- Turan, Z., & Goktas, Y. (2016). The Flipped Classroom: Instructional efficiency and impact of achievement and cognitive load levels. *Journal of E-Learning and Knowledge Society*, 12(4), 52-59. <https://doi.org/10.20368/1971-8829/1122>.
- Veidemane, A., Kaiser, F., & Craciun, D. (2021). Inclusive higher education access for underrepresented groups: It matters, but how can universities measure it? *Social Inclusion*, 9(3), 44-57.
- Viera do Nascimento, D., Roser-Chinchilla, J., & Mutize, T. (2020). *Towards universal access to higher education: International trends*. United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Vitta, J. P., & Al-Hoorie, A. H. (2023). The flipped classroom in second language learning: A meta-analysis. *Language Teaching Research*, 27(5), 1268-1292.
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard University Press.
- Webb, M., & Doman, E. (2020). Impacts of flipped classrooms on learner attitudes towards technology-enhanced language learning. *Computer Assisted Language Learning*, 33(3), 240-274.
- Williams, M. K. (2017). John Dewey in the 21st century. *Journal of Inquiry and Action in Education*, 9(1), 7. 91-100.
- Yang, C. C. R., & Chen, Y. (2020). Implementing the flipped classroom approach in primary English classrooms in China. *Education and Information Technologies*, 25(2), 1217-1235.
- Yu, S., & Liu, C. (2021). Improving student feedback literacy in academic writing: An evidence-based framework. *Assessing Writing*, 48, 100525.
- Zamel, V. (1984). *In search of the key: Research and practice in composition*. *On TESOL*, 83, 195-207.
- Zappe, S., Leicht, R., Messner, J., Litzinger, T., & Lee, H. W. (2009). "Flipping" the classroom to explore active learning in a large undergraduate course. In *2009 Annual Conference & Exposition* (pp. 14-1385).