

---

## | RESEARCH ARTICLE

### The use of Corpus in the Writing Activities among Omani ESL Learners

Alabri Naif Salim Khamis<sup>1</sup>✉ and Dr Mohammed Azannee Saad<sup>2</sup>

<sup>1</sup>English Lecturer, Nizwa University, Oman

<sup>2</sup>Assistant Professor, IIUM, Malaysia

**Corresponding Author:** Alabri Naif Salim Khamis, **E-mail:** [alabrinaif2007@gmail.com](mailto:alabrinaif2007@gmail.com)

---

## | ABSTRACT

The use of corpus as a form of technology in language teaching and learning has received attention from a number of studies. Generally, corpus which refers to a collection of real texts is viewed as having a potential to assist language learners in many aspects such as vocabulary and writing. However, the effective techniques or strategies of using corpus have not been clear where issues including learners not knowing how to utilize corpus to benefit their language learning activity are evident. In light of this, the present study evaluates the impacts of Corpus on the writing performance of ESL learners and later explores the challenges experienced by them to incorporate corpus tools into their writing activity. Using the mixed-method research design, six (N = 6) participants who are Omani ESL learners at the Foundation Programme level were put in pre- and post-Corpus incorporated writing activities as well as interviewed for their experience using Corpus. Results showed that the learners made improvement in their writing evident through more complex vocabularies are employed and fewer grammatical mistakes. However, the participants reported a number of challenges that may cause the incorporation to be difficult. The findings are significant for future framework or model on how the use of corpus can be effectively incorporated into language teaching and learning.

## | KEYWORDS

Corpus, Writing Process Approach, Omani ESL learners

## | ARTICLE INFORMATION

**ACCEPTED:** 01 August 2025

**PUBLISHED:** 27 August 2025

**DOI:** 10.32996/fell.2025.2.2.2

---

### 1. Introduction

The ability to write effectively in a second language is a crucial skill for language learners (Hinkel, 2021). Writing proficiency is not only essential for academic success but also for professional advancement and personal communication (Tardy, 2020). For English as a Second Language (ESL) and English as a Foreign Language (EFL) learners, writing is often seen as the pinnacle of language acquisition (Manchón & Matsuda, 2020). It demands a higher level of linguistic competence and the ability to express complex ideas clearly and coherently (Ferris & Hedgcock, 2019). Effective writing skills enable learners to convey their thoughts, argue their points, and present information in a structured manner, which is critical for their overall language development and future opportunities (Hyland, 2016; Hinkel, 2021; Li & DeKeyser, 2020; Storch, 2019).

However, writing in a second language presents numerous challenges (Hinkel, 2021). ESL learners often struggle with limited vocabulary, which hampers their ability to express ideas precisely (Nation, 2022). Studies such as those by Ferris (2018) and Leki (2007) have shown ESL learners to experience challenges in accurately using grammar and vocabulary, and in understanding and applying appropriate rhetorical styles. Grammatical differences between their native language and English can lead to frequent errors (Larsen-Freeman & Anderson, 2018), while a lack of familiarity with idiomatic expressions and collocations makes their writing sound unnatural (Wray, 2019). Moreover, cultural differences in rhetorical styles can further complicate the writing process (Connor, 2020). These challenges highlight the need for effective pedagogical strategies that can support learners in overcoming these obstacles and developing their writing proficiency (Hyland, 2019).

Various pedagogical approaches have been developed to address the challenges of writing instruction for ESL learners. Traditional methods, such as the product-oriented approach, focus primarily on the final written product, emphasizing grammatical correctness and overall coherence. While this approach is important, it often neglects the developmental stages of writing. Other methods, such as the genre-based approach, emphasize understanding different types of texts and their conventions. Process-oriented approaches, particularly the Writing Process Approach (WPA), focus on the steps involved in writing, including brainstorming, drafting, revising, and editing, which help learners develop a more comprehensive understanding of writing as a dynamic and recursive process (Badger & White, 2000).

The Writing Process Approach (WPA) is a pedagogical method that emphasizes writing as a process rather than a final product. WPA involves multiple stages of planning, drafting, revising, and editing, with feedback and revision playing critical roles. This approach allows learners to develop their writing skills gradually, making improvements at each stage based on feedback. WPA encourages learners to view writing as an iterative process, where they can refine their ideas and improve their expression through continuous practice and feedback. This approach fosters a deeper understanding of writing and helps learners become more effective and confident writers (Seow, 2002).

Several studies have highlighted the effectiveness of WPA in improving writing skills among ESL learners. Littlewood (2009) demonstrated that WPA promotes a deeper understanding of the writing process, helping learners produce higher quality writing compared to those following a traditional, product-oriented approach. Stapleton (2010) found that WPA enhances critical thinking and reflective practices, which are essential for effective writing. These studies suggest that WPA can significantly improve various aspects of writing, including coherence, cohesion, and grammatical accuracy, making it a valuable approach for teaching writing to ESL learners.

Incorporating technology into the Writing Process Approach has further enhanced its effectiveness. One such technological tool is the corpus, which consists of large collections of authentic texts that provide real-life examples of language use. Corpora offer invaluable insights into usage patterns, collocations, and grammatical structures that are often difficult to grasp through traditional resources alone. By integrating corpus tools into WPA, learners can access contextualized examples of language use, helping them understand and apply linguistic features more effectively in their writing. This integration represents a significant advancement in language learning, combining the strengths of WPA with the benefits of modern technology (Anthony, 2013).

A corpus is a database of authentic texts collected from various sources, such as books, newspapers, and academic journals. These texts are used to study language use in real-life contexts, providing learners with examples of how language is used in different situations. Corpus tools allow learners to search for specific words or phrases and see how they are used in context, which helps them understand their meanings, collocations, and grammatical structures. By examining authentic language use, learners can gain insights into the nuances of language and improve their writing proficiency. Corpus tools are particularly useful for advanced learners, as they require a higher level of linguistic knowledge to analyze and interpret the data effectively (Biber, Conrad, & Reppen, 1998).

Research has shown that corpus tools can significantly enhance language learning. Cobb (1997) found that corpus consultation improves learners' lexical knowledge and writing accuracy by providing authentic examples of language use. Kennedy and Miceli (2001) reported that intermediate learners who used corpus tools showed marked improvements in their writing, particularly in vocabulary usage and syntactic complexity. Yoon (2011) demonstrated that advanced learners who used corpus tools produced more complex and accurate written texts. These studies suggest that corpus tools can be a powerful supplement to traditional writing instruction, offering learners valuable insights into authentic language use.

Despite the advantages, using corpus tools also presents challenges. One major issue is the accessibility of technology, as not all learners have consistent access to the necessary devices and internet resources. The vast amount of data available in corpora can be overwhelming for learners, requiring substantial guidance and training to navigate effectively. Some learners may also struggle with the technical aspects of using corpus tools, which can hinder their ability to fully benefit from these resources. Ensuring that learners receive adequate support and training is essential to overcoming these challenges and maximizing the benefits of corpus tools in language learning (Johns, 1991).

This study aims to explore how Foundation Program learners in Oman use online corpus tools as part of the Writing Process Approach to enhance their ESL writing skills. By investigating the practical application and benefits of integrating corpus tools into WPA, this study seeks to contribute to the growing body of literature on innovative approaches to language learning. The findings of this research will provide insights into the effectiveness of corpus tools in improving writing proficiency and offer recommendations for educators on incorporating these tools into their teaching practices. This study aims to fill the gap in understanding the practical application and benefits of corpus tools in ESL writing instruction, providing valuable information for educators and policymakers to enhance language teaching methodologies (Conrad, 2019).

By addressing these key aspects, this study contributes to the ongoing discussion on the integration of technology in language education. It highlights the potential of corpus tools to transform writing instruction by providing learners with authentic language examples and fostering a deeper understanding of language use. The implications of this research extend beyond the classroom, offering insights for curriculum developers, policymakers, and educators seeking to improve language instruction through innovative methods. Through this comprehensive examination of corpus tools within the WPA framework, the study aims to pave the way for more effective and engaging writing instruction for ESL learners.

## 2. Methodology

### 2.1 Research Design

The goals of this study are to evaluate the impacts of Corpus on writing performance of EFL learners as well as to explore the learners' experience integrating Corpus into their writing activities. As such, mixed-method research design is selected. The combination of quantitative and qualitative research design enables the present study to evaluate the writing performance through the pre- and post-Corpus incorporated writing activities and later to understand the learners' experiences of using Corpus to complete the writing activity.

### 2.2 Participants

The participants in this study were six Foundation Program learners at a university in Oman. The participants were selected through purposive sampling technique where they are selected based on the pre-determined criteria. The criteria of selection are:

- a. English learners who are at the Foundation Programme level
- b. Omani learning English as a Second Language (ESL)
- c. Have studied English throughout the 12-year schooling in Oman

Other than these criteria, participants are diverse in their background of study (major), gender, proficiency level as well as place of origin. The diversity in proficiency levels allowed for a comprehensive analysis of how corpus tools impact learners with different language abilities. Table 1 shows the demographic profiles of the participants.

**Table 1: Participants' demographic profiles**

Participant	Age	Gender	Placement test result	Computer Literacy	Demographic region
A	19	F	80	Low	Aldahirah
B	19	F	78	High	Aldakhlia
C	19	F	79	High	Alburaimi
D	19	F	81	High	Alburaimi
E	19	M	79	Low	Aldakhlaia
F	19	M	79	High	Alburaimi

### 2.3 Data Collection Procedures

There are two ways for the intended data to be collected. First is through pre- and post-Corpus writing activities and secondly, interview with the participants.

Learners were introduced to online corpus tools and trained on their use throughout the writing process. The corpus tools used in this study include the Corpus of Contemporary American English (COCA) and other relevant online corpora. Training sessions focused on teaching learners how to navigate these tools, conduct searches, and analyze corpus data to improve their writing (Anthony, 2013).

The training sessions were designed to be interactive and hands-on, allowing learners to practice using the corpus tools in real-time. During these sessions, learners were taught how to search for specific words and phrases, analyze collocations, and interpret usage patterns. They were also provided with examples of how to use corpus data to improve their writing, such as incorporating authentic examples into their texts and using corpus data to identify and correct errors (Yoon & Hirvela, 2004).

### 2.4 Data Analysis

Since this study is within the mixed-method approach, two types of data analysis were employed. First, the writing samples were graded according to standardized rubrics that are used in the Foundation Programmes at the University. Table 2 shows the Foundation Program Writing Rubric.

**Table 2: Foundation Programme Writing Rubric**

Criteria	Excellent (4)	Good (3)	Fair (2)	Needs Improvement (1)
Content & Organization	Clearly organized with strong, relevant content. Logical flow and effective transitions. Utilizes technology effectively to enhance presentation of ideas.	Well-organized with mostly relevant content. Adequate flow and transitions. Uses technology appropriately to support presentation of ideas.	Some organization evident; content somewhat relevant. Attempted flow and transitions. Limited use of technology with inconsistent effectiveness.	Lack of organization; content lacks relevance. Poor flow and no transitions. Little to no use of technology or inappropriate use detracts from presentation of ideas.
Language Use	Precise and varied vocabulary. Complex sentence structures used effectively. Few errors. Technology enhances language use, such as for research or drafting.	Appropriate vocabulary used. Generally correct sentence structures. Minor errors do not impede understanding. Effective use of technology to support language skills, such as for editing or revising.	Basic vocabulary with occasional inaccuracies. Simple sentence structures predominate. Errors occasionally obscure meaning. Limited use of technology; does not significantly aid language skills.	Limited vocabulary. Frequent errors in grammar and sentence structure. Meaning is often unclear. Little to no use of technology or technology use is detrimental to language skills.
Coherence & Cohesion	Clear progression of ideas. Paragraphs well-developed and logically connected. Technology aids in maintaining coherence and cohesion, e.g., through digital outlining or multimedia links.	Adequate progression of ideas. Some development of paragraphs; connections between ideas sometimes unclear. Uses technology to some extent for organizing ideas or presenting multimedia content.	Attempts at progression of ideas but lacks development. Weak connection between paragraphs. Minimal use of technology with inconsistent impact on coherence and cohesion.	Lack of progression; paragraphs disconnected. Ideas are disjointed. Little to no use of technology or technology use disrupts coherence and cohesion.
Mechanics	Virtually error-free in terms of spelling, punctuation, and formatting. Technology enhances accuracy and presentation, e.g., through automated editing tools.	Minor errors in spelling, punctuation, or formatting that do not distract the reader. Utilizes technology for basic editing or formatting tasks.	Noticeable errors in spelling, punctuation, or formatting. Some distractions for the reader despite use of technology.	Numerous errors in spelling, punctuation, or formatting. Significant distractions for the reader. Little to no use of technology or technology use does not aid in mechanics.

The rubric was used as a framework to grade the learners' essays pre- and post-corpus incorporated writing activities. All essays were graded by a qualified instructor and the highest score that the learners can obtain is 20.

The second type of data analysis is thematic analysis that has been applied on the interview data. Once transcribed, the interview scripts were subjected to coding that captures the learners' experience as well as challenges of using Corpus in the writing activities.

### 2.5 Validity

Validity of the research instruments is obtained through a small pilot study that was conducted to evaluate the usefulness of the interview questions. On the other hand, reliability of this study is accomplished mainly through member's checking. Specifically, member's checking is employed to evaluate the grading scores assigned to the learners' essays as well as the themes that have been developed from the interview analysis.

### 2.6 Research Ethics

Written and signed authorization to carry out the study was secured from each pertinent institution. Participants were also made aware of their rights to confidentiality and their option to withdraw from the study at any time.

### 3. Results

The section presents two findings which are the writing samples of the learners in order to evaluate the impacts of Corpus on the writing performance and the learners' experience of using Corpus in their writing activities.

#### 3.1 Improvements in Writing Performance

Data showed significant improvements in learners' writing scores post-corpus intervention. Table 3 shows the score that the participants have obtained during the pre- and post-corpus writing activities.

**Table 3:** Foundation Programme Writing Rubric

Participant	Pre-corpus writing score	Post-corpus writing score
A	9 out of 20	12 out of 20
B	11 out of 20	13 out of 20
C	10 out of 20	13 out of 20
D	10 out of 20	12 out of 20
E	13 out of 20	15 out of 20
F	12 out of 20	13 out of 20
<b>Mean score</b>	<b>10.38%</b>	<b>13%</b>

For instance, Image 1 shows the sample of Learner A's writing (pre-test) and Image 2 shows the Learner A's post-test writing.

**Image 1:** Learner A's pre-Corpus writing

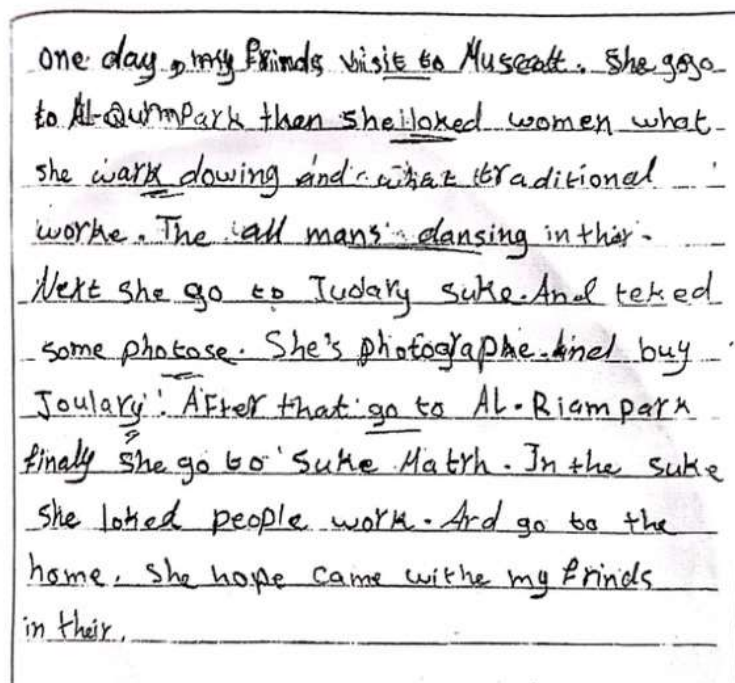


Image 2: Learner A's post-Corpus writing

When my friend visited my country Oman, she was very exciting trip. She explored a lot of thing that she wasn't know it before.

On her trip, at the first day, she visited the farge in Oman. She was so happy to see it and she take photographs. In the second day, she went to many places such as Al's Qaim Park, Al-Riyam Park and Al-Adam place. She enjoyed so much that for that. In the third day, she went to Muscat Festival. She saw the dance for international moment. She ate an Omani food. She played a traditional games after that, she went to sock Motrah. She bought an Omani clothe. Al-halwa Al-Omani because she love it. She also take some Omani jewelry like souvenirs to remind her that trip.

I was so happy when I saw the photographs. I was pride about my country and its beautiful places.

From the samples, it can be seen that Learner A has improved from 9/20 to 12/20, using more sophisticated vocabulary and fewer grammatical errors. After using a corpus, Learner A's writing showed marked improvement in several key areas. The structure of the text in image 1 becomes more logical, with transitional phrases such as "On the first day" and "On the third day" clearly demarcating the sequence of events, enhancing coherence and cohesion. This was a significant improvement from the initial text in image 1, where sentences like "Next she go to Judary Suke" lacked proper transitions. Grammatical accuracy also improved, with more consistent verb tenses, as seen in phrases like "She explored a lot of things," compared to the incorrect "She go to Al Rympark" in the earlier text. Additionally, sentence clarity saw significant enhancement, with more complex yet understandable sentences like "She was so happy to see it, and she took photographs." This was a clear contrast to the initial unclear sentence, "She loked women what she wark dowing." The awkward phrasing in the first text in image 1 was replaced by clearer, more fluid expression, demonstrating the learner's growing ability to convey ideas effectively. The use of a corpus allowed Learner A to better organize their ideas and link them cohesively, leading to a more polished piece of writing. Overall, the learner's writing became more coherent, accurate, and clear, showcasing how corpus-based learning tools can significantly enhance the writing skills of ESL.

Similarly, Image 3 shows the sample of Learner C's writing (pre-test) and Image 4 shows the post-test writing. From the samples, it can be seen that Learner B's score increased from 10/20 to 13/20, reflecting improved coherence and cohesion in writing.

Image 3: Learner C's pre-Corpus writing

Friends are necessary in people's lives

Do you agree or disagree? Use specific reasons and examples to support your opinion. Make sure your writing is clear and well-organized.

Every person has friends and <sup>more</sup> ~~mates~~ because we live in a society with people and if you ask me if we can live without friends or mates I will definitely say that we can't.

We need friends in our life, and we can't live without friends and anybody <sup>the opposite of</sup> say that ~~he~~ <sup>she</sup> can, actually they are lying.

Friends share with us the happy and sad moment. In the happy moment they share with us these nice <sup>as we feel</sup> ~~things~~ and feel happy. Also in the sad moment they eliminate our pain and make us feel better.

They always try to make friends because friends like ~~to~~ <sup>they</sup> tell us our mistakes and praise our good behaviors.

Image 4: Learner C's post-Corpus writing

My First day in Great One

Every thing was imagination. It was dream become true for somebody, but for other it's a nightmare.

It was Saturday. I waked up very early. I went the sunrise. The weather was cool and sunny. I was very because I will go to strange place but I was happy to meet new people.

I went to the school with my uncle and his son. When I entered to the school, I felt a strange feeling. I wasn't know anyone until I found my grandfather, my another uncle, my brother and my sister. My grandfather want my uncle in a same class, but that wasn't happen <sup>with my</sup>.

After they put me another class, they change me to my cousin class. I stayed in my new class doing with other child until the break started. Firstly, I was excited to explore the school. Then I started feeling boring and missing my home. After that I started crying. My teacher told me that stay a few time to back home, so I became relaxed. Since that time I stay waiting to back home.

When I returned to the home I was so happy. I told everyone what happened to me and I was satisfied to the next day. My mom said that I'm so strange because sometime I be happy and sometime I be sad in the school.

The two texts in image 3 and image 4 reveals marked improvements in Learner C's writing after using a corpus. Initially, the text in Image 3 lacked coherence and cohesion, with ideas poorly organized and transitions weak, as seen in the disjointed flow between sentences like "We need friends in our life" and "Friends share with us the happy and sad moment." Grammatical errors were frequent, including incorrect verb forms like "we can life without friends" and subject-verb agreement issues. Additionally, the clarity of sentences was compromised by awkward phrasing, such as "Friends share with us the happy and sad moment," and unnecessary repetition. After using a corpus, the coherence of the writing improved significantly, with a clear chronological flow

in Image 4, evident in sentences like "When I returned home, I was so happy I told everyone what happened to me." Cohesive devices were used more effectively, enhancing the overall structure, as seen in the transitions like "After they put me in another class." Grammatical accuracy also increased, with fewer errors and better sentence construction, such as the correct use of subject-verb agreement in "I stayed in my new class playing with other children." The clarity of sentences improved as well, with more precise language and varied sentence structures, like "My teacher told me that still a few times back home, so I became relaxed." This comparison demonstrates how corpus use can significantly enhance writing quality by improving organization, reducing errors, and increasing clarity. These improvements indicate that corpus tools can effectively support learners in developing better writing skills by providing authentic language examples and fostering independent language discovery (Yoon, 2016).

The use of corpus tools enabled learners to access a wide range of authentic texts, which helped them understand how language is used in real-life contexts. This exposure to authentic language use contributed to the improvement in their writing proficiency, as they were able to apply what they learned from the corpora to their own writing tasks (Boulton, 2010). For example, Learner B mentioned that the corpus tools helped them identify and use appropriate collocations, which made their writing more natural and fluent.

### **3.2 Learners' Experience and Challenges of Using Corpus**

#### **3.2.1 Confident and autonomous writer**

Interviews revealed that learners felt more confident and autonomous in their writing. Corpus tools helped learners understand the contextual use of words and phrases, enhancing their ability to revise and edit their work. For example, Learner B mentioned that the use of corpus tools made them more aware of collocations and common usage patterns, which improved their writing fluency. Learner B said

*"First, I would look up the Omani meaning in an electronic dictionary, and then I would choose a word that I had never used before in my writing in order to make my essay more academic. A number of learners expressed an interest in using corpora to assist them in overcoming their difficulties in collocating words after being introduced to the concepts of corpora".*

Learners also reported that they became more attentive to grammatical accuracy and vocabulary use, which contributed to their overall writing improvement (Johns, 1991).

The qualitative data highlighted learners appreciated the autonomy that corpus tools provided. They were able to independently verify their language use and make necessary corrections without relying solely on their instructors. This independence fostered a sense of ownership over their learning process, making them more engaged and motivated (O'Sullivan & Chambers, 2006). For instance, Learner C stated that using the corpus tools made them feel more empowered and confident in their writing abilities, as they could independently check and improve their work. According to Learner C:

*"Writing is not my strong suit. This is because I always use a single word to express my point of view in writing. Corpora provided me with the opportunity to research collocation and synonym usage, which allowed me to improve my writing skills"*

#### **3.2.2 Technological issues**

Some learners faced difficulties with the technological aspects of using corpus tools and required more training to fully utilize them. Limited access to devices during school hours was a barrier to consistent use of corpora. For instance, Learner D highlighted the challenge of accessing corpus tools outside of designated training sessions, which limited their ability to practice independently. He said,

*"It takes me a long time to locate a word or phrase because of my inexperience with the search tools. It was tough for me to recollect all of the processes needed in doing a corpora search because this was the first time, we'd ever heard of them. When I'm utilizing these two corpora, it's quite simple for me to get confused about the sequence in which I search for terms. I frequently forget to swap the order of the words from the left to the right side of the page when it comes to the words. As a result, more corpus-based training, in my opinion, would be beneficial. Restrictions imposed by teachers on the use of electronic devices in the classroom".*

These challenges underscore the need for comprehensive training and support to ensure learners can effectively integrate corpus tools into their writing practices (Hedgecock & Ferris, 2009).

#### **3.2.3 Large amount of corpus data**

Additionally, some learners struggled with the sheer volume of data available in corpora, finding it overwhelming to sift through numerous examples to find relevant usage patterns. This difficulty highlights the importance of providing learners with strategies for efficient corpus use and ensuring they have the skills needed to analyze corpus data effectively (Anthony, 2013). For example, Learner E mentioned that they often felt lost when navigating through large amounts of corpus data and needed more guidance on how to efficiently find and use relevant examples. He said,



*"Because we had never heard of corpora before, it was difficult for us to recall all of the steps involved in searching in such a short period of time. In using these two corpora, it is very easy for me to make mistakes in the order in which I look for keywords. For example, I always forget when I should rearrange the words so that they are on the left side of the page rather than the right side. As a result, I believe it would be beneficial for me to receive additional corpus training".*

It is recommended that the authors provide adequate information to enable the work to be replicated. Methods that have previously been published should be referenced, and only relevant modifications should be mentioned. The materials used and methods applied in the research should be sufficiently and explicitly explained.

#### 4. Discussion

While the Writing Process Approach (WPA) has significantly influenced foreign language teaching, traditional resources like dictionaries provide limited contextual information, making it challenging for learners to use language effectively in their writing (Harvey & Yuill, 1997). Corpus tools offer a solution by providing authentic examples and context-specific usage, which can enhance learners' understanding and application of language. The findings of this study suggest that integrating corpus tools into WPA can address some of the limitations of traditional resources, offering a more comprehensive approach to language learning (Chambers, 2005). For instance, while dictionaries can provide definitions and synonyms, they often lack contextual examples that show how words and phrases are used in real-life situations. Corpus tools, on the other hand, offer extensive databases of authentic texts that provide rich contextual information, helping learners understand how to use language more effectively in their writing. This contextual understanding is crucial for developing advanced writing skills and producing texts that are coherent, cohesive, and contextually appropriate (Gilmore, 2009).

The integration of corpus tools into WPA has been shown to enhance writing skills, particularly for advanced learners (Garner, 2011; Gilmore, 2009). These tools provide real-life examples and contextual information, helping learners understand and apply language more effectively. The study's findings align with previous research, demonstrating that corpus tools can significantly improve various aspects of writing, including accuracy, complexity, and overall proficiency (Yoon, 2011). The study also found that learners became more aware of lexico-grammatical patterns through their use of corpus tools. This awareness is crucial for developing advanced writing skills, as it enables learners to use language more naturally and accurately. The ability to see authentic examples of language use in context helps learners understand how to use words and phrases appropriately, improving their writing quality (Chambers & O'Sullivan, 2004). For example, learners reported that they were able to use more varied and sophisticated vocabulary in their writing after using corpus tools, which contributed to the overall improvement in their writing proficiency.

The study supports the idea that learner autonomy and authenticity are complementary. By using authentic texts attentively, learners become more independent and effective ESL writers (Poole, 2020; Shakib et al., 2020). The findings suggest that the use of corpus tools can foster learner autonomy by enabling students to independently explore language use and verify their understanding. This autonomy is essential for developing effective writing skills, as it encourages learners to take an active role in their language learning process (Negm & Mandour, 2020). The study also found that learners' use of authentic texts helped them develop a deeper understanding of language use in context. This understanding is crucial for writing proficiency, as it allows learners to apply what they have learned from authentic texts to their own writing. The use of authentic texts in corpus tools provides learners with real-life examples that they can use to improve their writing skills (Boulton, 2017). For instance, learners reported that they were able to use more idiomatic expressions and natural language patterns in their writing after using corpus tools, which enhanced the overall quality and fluency of their texts.

The findings demonstrate that collocations can be effectively incorporated into any level of ESL learning. While lower-level learners may struggle with processing corpus data, exposure to collocational elements through other sources, such as printed materials, can still be beneficial. The study's findings suggest that corpus tools can help learners develop a better understanding of collocations, which are essential for writing fluency and accuracy (Crosthwaite, 2017; Li, 2017). The study also highlights the importance of providing learners with tailored instructional materials that include corpus-informed content. These materials can supplement traditional textbooks and provide learners with additional practice opportunities, helping them develop a more comprehensive understanding of language use. By incorporating corpus-informed materials into the curriculum, educators can enhance the effectiveness of their teaching and support learners in developing their writing skills (Wu, 2016). For example, teachers can create exercises that focus on common collocations and usage patterns identified through corpus analysis, helping learners internalize these patterns and use them more effectively in their writing.

Technological malfunctions can disrupt the learning process, emphasizing the need for reliable access to corpus tools and alternative resources. The study found that learners who experienced technical difficulties with online corpora were often left without alternative sources of assistance. This finding underscores the importance of ensuring that learners have access to reliable technology and backup resources, such as offline corpora or corpus-based dictionaries, to support their learning (Sun, 2003). Educators should also provide learners with strategies for dealing with technological issues, such as troubleshooting common problems and identifying alternative resources. By equipping learners with these strategies, educators can help ensure

that technological challenges do not hinder the learning process and that learners can continue to make progress even in the face of technical difficulties (Conrad, 2019). For instance, teachers can provide learners with offline versions of corpora or printouts of relevant corpus data, ensuring that they have access to the necessary resources even when technical issues arise.

In conclusion, this study has demonstrated the significant potential of integrating corpus tools into the Writing Process Approach (WPA) to enhance the writing skills of ESL learners. Traditional resources such as dictionaries, while useful, often lack the contextual richness that corpus tools provide (Harvey & Yuill, 1997). By offering authentic examples and context-specific usage, corpus tools address many limitations of traditional resources, enabling learners to produce more coherent, cohesive, and contextually appropriate texts (Chambers, 2005; Gilmore, 2009). The integration of these tools has been particularly beneficial for advanced learners, helping them develop a deeper awareness of lexico-grammatical patterns and use language more naturally and accurately (Garner, 2011; Yoon, 2011).

The study also highlights the complementary relationship between learner autonomy and authenticity. By independently exploring language use through authentic texts, learners can enhance their writing proficiency and develop a more active role in their language learning process (Poole, 2020; Shakib et al., 2020). This autonomy is crucial for developing effective writing skills, as it encourages learners to take ownership of their learning (Negm & Mandour, 2020).

Despite the evident benefits, the study acknowledges challenges such as technological malfunctions and the need for reliable access to corpus tools. These challenges underscore the importance of providing comprehensive training for both teachers and learners to ensure effective use of corpus resources (Sun, 2003; Conrad, 2019). Educators should be equipped with strategies to help learners navigate and interpret corpus data, while policymakers should invest in reliable technology and support the integration of corpus tools into educational curricula (Gavioli & Aston, 2001; Andrade, 2000). Ultimately, this study underscores the transformative potential of corpus tools in writing instruction and calls for further research to explore specialized corpora and develop effective instructional strategies. By addressing these needs, we can enhance the effectiveness of writing instruction and support ESL learners in developing their writing skills.

## 5. Conclusion

Future research should explore the use of specialized corpora tailored to specific academic disciplines, as this study primarily utilized general corpora. Investigating the impact of specialized corpora on learners' writing skills can provide valuable insights into effective ways to integrate corpus tools into educational contexts (Boulton & Cobb, 2017). Additionally, research should develop instructional strategies for teaching learners how to use corpus tools, ensuring they can fully utilize these resources to enhance their writing skills (Charles, 2018). Further studies could examine the impact of corpus tools on different aspects of writing, such as cohesion, coherence, and idea development, providing insights into how these tools support the writing process (Gavioli, 2020). Another area for future research is the long-term impact of corpus tools on writing proficiency. Longitudinal studies tracking learners' progress over time can provide information on the sustained benefits of using corpus tools in writing instruction. Additionally, researchers could explore the impact of corpus tools on writing in different genres, such as academic, creative, and professional writing, to understand their application in various contexts (Gilmore, 2009). The study's findings suggest that teachers should receive training on corpus tools to effectively support their students and incorporate corpus-informed materials into their teaching, providing learners with opportunities to practice using corpus data in their writing (Kennedy & Miceli, 2001).

**Funding:** This research received no external funding

**Conflicts of Interest:** The authors declare no conflict of interest

**Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

## References

- [1] Anthony, L. (2013). *AntConc: A corpus analysis toolkit for concordancing and text analysis*. Waseda University.
- [2] Badger, R., & White, G. (2000). A process genre approach to teaching writing. *ELT Journal*, 54(2), 153-160. <https://doi.org/10.1093/elt/54.2.153>
- [3] Chambers, A. (2005). Integrating corpus consultation in language studies. *ReCALL*, 17(1), 80-99. <https://doi.org/10.1017/S0958344005000519>
- [4] Connor, U. (2020). *Intercultural rhetoric in the writing classroom*. University of Michigan Press.
- [5] Ferris, D. R. (2018). *Teaching L2 composition: Purpose, process, and practice* (3rd ed.). Routledge.
- [6] Ferris, D. R., & Hedgcock, J. (2019). *Teaching L2 composition: Purpose, process, and practice* (4th ed.). Routledge.
- [7] Garner, J. (2011). Corpus linguistics and second language acquisition. *Annual Review of Applied Linguistics*, 31, 109-123. <https://doi.org/10.1017/S0267190511000086>
- [8] Gavioli, L. (2020). *Corpus analysis and language pedagogy*. Bloomsbury Academic.
- [9] Hedgcock, J. S., & Ferris, D. R. (2009). *Teaching ESL composition: Purpose, process, and practice* (2nd ed.). Routledge.

- [10] Hinkel, E. (2021). *Teaching academic ESL writing: Practical techniques in vocabulary and grammar*. Routledge.
- [11] Hyland, K. (2016). *Second language writing*. Cambridge University Press.
- [12] Hyland, K. (2019). Genre and second language writing. *The TESOL Encyclopedia of English Language Teaching*, 1-6.  
<https://doi.org/10.1002/9781118784235.eelt0594>
- [13] Larsen-Freeman, D., & Anderson, M. (2018). *Techniques and principles in language teaching* (4th ed.). Oxford University Press.
- [14] Li, S., & DeKeyser, R. (2020). *Interactions in second language learning*. Wiley-Blackwell.
- [15] Littlewood, W. (2009). Process-oriented approaches to foreign language teaching. *Language Teaching*, 42(3), 337-352.  
<https://doi.org/10.1017/S0261444808005612>
- [16] Manchón, R. M., & Matsuda, P. K. (2020). Writing in a second language. In J. W. Schwieter (Ed.), *The Cambridge handbook of language learning* (pp. 445-464). Cambridge University Press. <https://doi.org/10.1017/9781108684907.026>
- [17] Nation, I. S. P. (2022). *Learning vocabulary in another language* (3rd ed.). Cambridge University Press.
- [18] O'Sullivan, Í., & Chambers, A. (2006). Learners' writing skills in French: Corpus consultation and learner evaluation. *Journal of Second Language Writing*, 15(1), 49-68. <https://doi.org/10.1016/j.jslw.2006.01.002>
- [19] Poole, A. (2020). Student use of corpora for autonomy in EAP writing. *Journal of English for Academic Purposes*, 43, 100832.  
<https://doi.org/10.1016/j.jeap.2019.100832>
- [20] Shakib, R., et al. (2020). Autonomous learning in the writing classroom. *Journal of Language Teaching and Research*, 11(2), 348-356.  
<https://doi.org/10.17507/jltr.1102.20>