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Title

The Effect of Automated Error Corrective Feedback on the Improvement of EFL Learners' Writing and Autonomy

The Case of First Year LMD Students at the Department of
English of Mohamed Cherif Messaadia Universty-SoukAhras

Submitted by

Toufaha SAHKI

Supervised by

Prof. Madjda CHELLI

Board of examiners

Touria DRID	Prof	University of Ouargla	Chair
Madjda CHELLI	Prof	University of Constantine 1	Supervisor
Nawel DIB	MCA	University of Ouargla	Examiner
Nousseiba DJEHA	MCA	University of Ouargla	Examiner
Ibtissem TOUHAMI	MCA	University Center of Aflou	Examiner
Manel TRIKI	MCA	University of Beskra	Examiner

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Title

**The Effect of Automated Error Corrective
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Submitted by
Toufaha SAHKI

Statement of Authorship

I hereby declare that the present work entitled “*The Effect of Automated Error Corrective Feedback on the Improvement of EFL Learners’ Writing and Autonomy, The Case of First Year LMD Students at the English Department of Mohamed Cherif Messsadia University- Souk Ahras*” and supervised by Prof. Madjda CHELLI is entirely my original work. This thesis represents the results of my own research, and I have not used any sources which have not been fully acknowledged. I confirm that this thesis has not been previously submitted for any degree, diploma, or institution. I also certify that this work contains no plagiarism and is the result of my own investigation, except where otherwise stated.

Date: 01/09/2023

Signature:

Sahki

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I am also indebted to the members of the jury for the time and effort they will spend in reading and commenting on this work.

Dedication

To my family

Abstract

Within the context of English as a foreign language education, the traditional teacher-centered process of teaching and assessing writing has presented challenges for educators, especially concerning the provision of timely and personalized feedback to individual learners. In this context, the present study investigates the potential of automated error corrective feedback to address these challenges and enhance the writing proficiency and autonomy of first-year English as a Foreign Language students of Mohamed Cherif Messaadia University. This thesis hypothesizes, first, that these students make different types of writing errors and lack self-dependent strategies to minimize these errors and improve their writing. Second, if it is well integrated in the EFL writing class, automated corrective feedback will potentially improve Algerian EFL students' writing proficiency. Last, sustained exposure to automated writing error correction tools and raising learners' awareness of their use might promote the uptake of feedback and nurturing learners' autonomy. To address the above mentioned objective, a writing difficulties questionnaire, an attitude interview and a classroom observation were used as data collection tools within a quasi-experimental design.

Analysis of the

writing difficulties questionnaire revealed that students encounter various difficulties and produce different types of errors while writing. These errors are related to many factors. the results of the quasi-experiment showed that the use of automated corrective feedback tools improves students' writing proficiency and raises their autonomy, as the results of the pre-test and post-test maintained different levels. Finally, the results of the attitudes interview revealed that students have positive attitude towards automated corrective feedback. The Study's findings emphasize the positive effect of automated error corrective feedback on writing proficiency and autonomy.

Key words: Automated error corrective feedback, Writing proficiency, Learner autonomy, Write & Improve

Résumé

Dans le contexte de l'enseignement de l'anglais langue étrangère, le processus traditionnel d'enseignement et d'évaluation de la production écrite centré sur l'enseignant a présenté des défis aux éducateurs, notamment en ce qui concerne la fourniture d'un feedback opportun et personnalisé aux apprenants individuellement. Dans ce contexte, la présente étude examine le potentiel du retour automatisé de correction d'erreurs pour relever ces défis et améliorer la compétence rédactionnelle et l'autonomie des étudiants de première année d'anglais langue étrangère de l'Université Mohamed Cherif Messaadia. Cette thèse émet les hypothèses suivantes, premièrement, que ces étudiants commettent différents types d'erreurs d'écriture et manquent de stratégies auto-dépendantes pour minimiser ces erreurs et améliorer leur écriture. Deuxièmement, s'il est bien intégré dans le cours d'écriture d'EFL, le feedback correctif automatisé améliorera potentiellement les compétences en écriture des étudiants algériens d'EFL. Enfin, une exposition soutenue aux outils automatisés de correction des erreurs d'écriture et la sensibilisation des apprenants à leur utilisation pourraient favoriser l'adoption du feedback et favoriser l'autonomie des apprenants. Pour atteindre l'objectif mentionné ci-dessus, un questionnaire sur les difficultés d'écriture, un entretien d'attitude et une observation en classe ont été utilisés comme outils de collecte de données dans le cadre d'une conception quasi- expérimentale. L'analyse du questionnaire sur les difficultés d'écriture a révélé que les étudiants rencontrent diverses difficultés et commettent

différents types d'erreurs lors de l'écriture. Ces erreurs sont liées à de nombreux facteurs. Les résultats de la quasi-expérience ont montré que l'utilisation d'outils automatisés de rétroaction corrective améliore la compétence rédactionnelle des étudiants et augmente leur autonomie, car les résultats du pré-test et du post-test maintiennent des niveaux différents. Enfin, les résultats de l'entretien sur les attitudes ont révélé que les étudiants ont une attitude positive à l'égard du feedback correctif automatisé. Les résultats de l'étude soulignent l'effet positif du feedback automatisé de correction des erreurs sur la compétence rédactionnelle et l'autonomie.

Mots clés : Maîtrise rédactionnelle, Autonomie de l'apprenant, Retour correctif d'erreur automatisé, Ecrire et améliorer

ملخص

في سياق تعليم اللغة الإنجليزية كلغة أجنبية، شكلت عملية تدريس وتقييم الكتابة التقليدية التي تتمحور حول المعلم تحديات للمعلمين، خاصة فيما يتعلق بتوفير التغذية الراجعة في الوقت المناسب وبشكل شخصي للمتعلمين الأفراد. في هذا السياق، تبحث الدراسة الحالية في إمكانية التغذية الراجعة التلقائية لتصحيح الأخطاء لمواجهة هذه التحديات وتعزيز إتقان الكتابة والاستقلالية لطلاب السنة الأولى في اللغة الإنجليزية كلغة أجنبية بجامعة محمد شريف مساعدي. تفترض هذه الأطروحة، أولاً، أن هؤلاء الطلاب يرتكبون أنواعاً مختلفة من الأخطاء الكتابية ويفتقرون إلى استراتيجيات الاعتماد على الذات لتقليل هذه الأخطاء وتحسين كتابتهم. ثانياً، إذا تم دمجها جيداً في فصل الكتابة باللغة الإنجليزية كلغة أجنبية، فمن المحتمل أن تؤدي ردود الفعل التصحيحية الآلية إلى تحسين إتقان الكتابة لدى طلاب اللغة الإنجليزية كلغة أجنبية. وأخيراً، قد يؤدي التعرض المستمر لأدوات تصحيح أخطاء الكتابة الآلية وزيادة وعي المتعلمين باستخدامها إلى تعزيز استيعاب التعليقات وتعزيز استقلالية المتعلمين. ولتحقيق الهدف المذكور أعلاه، تم استخدام استبيان صعوبات الكتابة ومقابلة المواقف والملاحظة الصفية كأدوات لجمع البيانات ضمن تصميم شبه تجريبي. كشف تحليل استبيان صعوبات الكتابة أن الطلاب يواجهون صعوبات مختلفة وينتجون أنواعاً مختلفة من الأخطاء أثناء الكتابة. وترتبط هذه الأخطاء بعوامل عديدة. وأظهرت نتائج شبه التجربة أن استخدام أدوات التغذية الراجعة التصحيحية الآلية يحسن إتقان الكتابة لدى الطلاب ويرفع من استقلاليتهم، كما حافظت نتائج الاختبار القبلي والاختبار البعدي على مستويات مختلفة. وأخيراً، كشفت نتائج مقابلة الاتجاهات أن الطلاب لديهم اتجاه إيجابي نحو التغذية الراجعة التصحيحية الآلية. تؤكد نتائج الدراسة على التأثير الإيجابي للتغذية الراجعة التصحيحية للأخطاء الآلية على إتقان الكتابة والاستقلالية.

الكلمات المفتاحية: إتقان الكتابة، استقلالية المتعلم، التغذية الراجعة التلقائية لتصحيح الأخطاء، اكتب و تحسن

List of Abbreviations

ACF: Automated Error Corrective Feedback.

AF: Automated Feedback.

AI: Artificial Intelligence.

AWE: Automated Writing Evaluation.

CALL: Computer-Assisted Language Learning.

EFL: English as a Foreign

ESL: English as a Second Language.

ESP: English for Specific Purposes.

ICTs: Information and Communication Technologies.

MCMU: Mohamed Cherif Messadia University.

NLP: Natural Language Processing.

Num: Number

S: Student

SD: Standard Deviation

WC & W: Written Comprehension and Expression

WIF: Write and Improve” automated corrective feedback.

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In recent years, language education has witnessed a notable transformation driven by advancements in technology. Among the various technological innovations, automated error corrective feedback (ACF) has emerged as a promising tool for enhancing language learning, particularly in the context of English as a Foreign Language (EFL) instruction. ACF refers to the utilization of computer-based programs that provide instant feedback to learners on their writing errors, aiming to improve their accuracy, fluency, and overall writing proficiency (Ferris, 2010). This shift towards technology-integrated language learning has sparked considerable interest and debate among educators and researchers, as the potential benefits of ACF in supporting learners' writing development and autonomy have become subjects of exploration.

Writing skills stand as a cornerstone in language learning, serving as a means of effective communication and self-expression. Proficient writing not only reinforces grammatical and lexical knowledge but also nurtures critical thinking, creativity, and cultural understanding. Within the context of EFL education, writing proficiency plays a pivotal role in helping learners become competent communicators, both academically and professionally. However, the process of teaching and assessing writing has presented challenges for educators, especially concerning the provision of timely and personalized feedback to individual learners.

Traditional teacher-written feedback on students' writing has been a widely used approach to address errors and guide learners in their language development. While this practice has its merits, it is not without limitations, particularly in large class settings where providing detailed feedback to each student becomes time-consuming and impractical (Nystrom, 1983; Lee et al., 2009). Moreover, some learners may find teacher-written feedback overwhelming or struggle to apply it effectively to subsequent writing tasks (Grimes

and Warschauer, 2010). As language education strives to embrace learner-centered pedagogies, there is a growing need to explore alternative strategies that empower learners to take more active roles in their learning journey.

In response to these challenges, ACF tools have emerged as potential solutions to provide immediate, consistent, and individualized feedback to learners, allowing them to engage in a more autonomous and self-directed writing process (Warschauer and Healey's, 1998; Sheen, 2007). These automated tools hold the promise of assisting educators in supporting learners' writing development while freeing up valuable instructional time for higher-order language skills and content-related discussions (Fernández-Toro & Hurd, 2014).

Nevertheless, despite the increasing use of ACF in language education, empirical research on the instructional use of such tools in EFL writing instruction, particularly in the Algerian context, remains scarce. This study aims to address this gap in the literature by investigating the impact of the "Write & Improve" program, an ACF tool developed by Cambridge English University, on the writing proficiency and autonomy of first-year EFL students at the University Mohamed Cherif Messadia (MCMU), Souk Ahras.

By examining the effectiveness of the "Write & Improve" program in providing automated error corrective feedback, comparing it to traditional teacher-written feedback, and exploring learners' perceptions and experiences with this technology-integrated approach, the study seeks to offer valuable insights for language educators and policymakers. The findings are anticipated to contribute to the growing body of knowledge on technology integration in language education and provide evidence-based recommendations to enhance EFL writing instruction and promote learner autonomy in the context of MCMU, Souk Ahras.

Background of the Study

English has become a global lingua franca, serving as a bridge for communication among individuals from diverse linguistic and cultural backgrounds (Crystal, 2003). As a

result, the demand for English language proficiency has surged, leading to an increased emphasis on EFL education worldwide (Graddol, 2010). Within the context of EFL learning, *writing* is a crucial skill that holds significant implications for learners' academic, professional, and social success (Hyland, 2018).

Writing proficiency is essential for EFL learners to effectively communicate their ideas, knowledge, and perspectives (Silva & Matsuda, 2011). It enables them to participate actively in academic discourse, express complex thoughts, and engage in cross-cultural communication (Matsuda & Tardy, 2007). Furthermore, strong writing skills are highly valued in professional settings, where individuals are required to compose reports, emails, and other documents that convey information accurately and persuasively (Grabe & Kaplan, 2015).

However, mastering writing in a foreign language can be a challenging endeavor. EFL learners often face numerous obstacles in developing their writing abilities. These challenges can arise from differences in writing conventions, vocabulary, and sentence structure between their native language and English. Moreover, the complexities of English grammar and syntax may overwhelm learners, hindering their confidence and inhibiting the flow of their ideas (Ferris, 2003).

Traditionally, language teachers have played a central role in providing corrective feedback to address learners' writing errors. While teacher-provided feedback is valuable, it can be time-consuming and challenging to provide individualized attention to each student in large EFL classrooms. As a result, educators have turned to technology to supplement their efforts and meet the diverse needs of learners (Ferris & Hedgcock, 2014).

Automated error corrective feedback (ACF) has emerged as an innovative approach to assist EFL learners in improving their writing skills. ACF systems utilize computer programs equipped with natural language processing and machine learning algorithms to analyze

learners' written work and provide immediate feedback on grammar, spelling, punctuation, and syntax errors (Bitchener, 2018). These systems offer the advantages of time efficiency, scalability, and personalized feedback, making them increasingly popular in language learning settings (Lee & Huang, 2018).

While studies have explored the effectiveness of ACF in improving EFL learners' writing skills, there is a need for context-specific research to assess its impact in different educational environments (Li & Li, 2018). Additionally, as technology takes a more prominent role in language education, concerns have been raised about its potential effect on learners' autonomy and critical thinking abilities (Zhang & Cheng, 2019). Some researchers argue that overreliance on automated feedback may limit learners' opportunities to identify language patterns independently, leading to a reduction in their autonomy and self-directed learning abilities (Huang et al., 2020).

In light of these considerations, the present research work aims to investigate the effect of automated error corrective feedback on the improvement of EFL learners' writing skills and their autonomy at MCMU. By examining the implementation of ACF among first-year EFL students at the university, this study seeks to contribute valuable insights into the effectiveness of ACF in this specific context and its implications for language pedagogy. Furthermore, by exploring learners' perspectives on ACF and its impact on their autonomy, the research aims to inform educational practices that empower students to become independent and self-regulated learners (Pae & Kim, 2021).

Through a comprehensive analysis of both quantitative and qualitative data, this study endeavors to provide a holistic understanding of the potential benefits and challenges of ACF in EFL writing instruction. The findings of this research can inform language educators and policymakers in their efforts to leverage technology effectively to enhance language learning outcomes and foster learners' autonomy in the University of Souk Ahras and similar

educational contexts. Ultimately, the insights gained from this study can contribute to the advancement of EFL education and language learning practices in the global context of English language instruction (Reinders & White, 2016).

Statement of the Problem

Writing is a basic pillar of language learning and its role is primal in developing learners' overall proficiency. The process of writing suggests that teachers can actually teach students how to write with coherence, an appropriate grammar structure and an acceptable spelling, without denying the importance of their corrective feedback which plays a controversial role in improving their students' writing skills if it is given appropriately and in such a way that it helps the learners to consistently improve their writing capacities (Boud & Molloy, 2013; Nicol, 2010).

Feedback provision in the writing process is one of many critical instructional practices. The relationship between the feedback and the quality of writing is complicated because they are affected by many aspects such as the types and nature, delivery formats, and the conditions under which it is provided (Troussett, 1996). For a teacher's written feedback to be effective, Nicol (2010, pp. 212-213) has developed a set of ten principles and characteristics as follows:

1. Understandable – expressed in a language that students will understand.
2. Selective - commenting in reasonable detail on two or three things that students can do something about.
3. Specific - pointing to instances in the student's submission where the feedback applies.
4. Timely - provided in time to improve the next assignment.
5. Contextualised - framed with reference to the learning outcomes and/or assessment criteria.
6. Non-judgemental - descriptive rather than evaluative, focused on learning goals, not just performance goals.

7. Balanced - pointing out the positive as well as areas in need of improvement.
8. Forward looking - suggesting how students might improve subsequent assignments.
9. Transferable - focused on processes, skills and self-regulatory processes not just on knowledge content.
10. Personal - referring to what is already known about students and their previous work.

However, from the practical point of view, providing corrective feedback to learners about their writing errors on a regular basis with respect to the above mentioned characteristics is problematic because of many reasons. The element of timeliness in particular can be challenging in a contemporary higher education environment with high numbers of students and large workloads of teachers who make considerable efforts and spend a long time circling, underlying and correcting errors, rearranging ideas, trying to grasp what the student writer intends, and making suggestions for improving their students' written pieces...

Despite all these efforts from the side of the teachers in terms of feedback provision, yet surprisingly, the majority of the EFL students are not favourable to their teachers' feedback practices, and therefore, do not use the feedback that they get effectively because of many reasons among which the fact that the teacher may not be able to give individualized, immediate, content-related feedback to multiple drafts (Grimes and Warschauer, 2010; Lee et al, 2009), i.e, it is difficult for them to give feedback as often as students ask and at their very first attempts (Nystrom, 1983). Also, some teachers, because of time constraints, give corrective feedback on the students' final drafts only, and sometimes, it takes them a long period to return the written pieces, so that students lost interest in whatever comment made. Consequently, many students overlook their teachers' corrective feedback.

In addition, while the recent educational assumptions turn around the leading role of students as agents of action in the learning process (Raman, 2004); with most traditional written teachers' feedback practices, students tend to be considered as mere recipients,

and the existing practice as more teacher-centered in the sense that the focus is on teachers' actions rather than on students' reactions (Ferris, 2003; Lee, 2007)

In response to the problems found with the quality of feedback given by teachers, seeking alternative strategies and effective self-learning tools is critical and required to give corrective feedback appropriately and in such a way that it helps students to consistently improve their writing skills with an autonomous way.

With the rapid development in the fields of information technologies and natural language processing in last few decades, computerized feedback has been researched and suggested in studies as an alternative for a consistent, prompt and effective feedback. Computer automated writing feedback applications "can interact with the material to be learned, including (providing) meaningful feedback and guidance" (Warschauer and Healey's, 1998). Automated feedback tools offer considerable potential in being able to provide timely feedback at a time and place to students (Attali & Burstein, 2006). This means that the feedback students seek can be immediate, thus overcoming the lag time involved in waiting until teachers have time in their busy workloads to provide feedback. Automated writing error-correction programs go in harmony with learner-centered approaches since it can provide teachers with the time to support their students in the higher order features of writing by changing the role of the teacher in the writing sessions via creating more chances to interact with their students on other aspects of writing through multiple feedback cycles (Fernández-Toro & Hurd, 2014; Sheen, 2007). Automated feedback relies to an important extent on students being self-directed and taking responsibility for making the feedback process effective – what Winstone et al. (2017) call 'proactive reception'.

However, Research is particularly lacking on the instructional use of automated error corrective feedback and its effectiveness for improving EFL learners' writing as well as well as EFL learners' preferences and perceptions of automated corrective feedback (Ware &

Warschauer, 2006), thus rigorous experimental research is needed to evaluate the quality of feedback generated by these systems.

In this context and following the aforementioned situation, two problems are evident. First, the controversial results of the studies about the benefits of automated writing feedback tools for EFL learners' writing improvement autonomy are still debatable. Second, EFL learners' preferences and perceptions of automated corrective feedback remain unexplored and poorly understood. In light of this, and depending on Nicol's (2010) previously outlined principles and characteristics -as analytical tools to evaluate the automated writing error-correctors effectiveness-, the present study is proposed to evaluate the automated error corrector system called "Write & Improve" (Cambridge English, 2018) program in terms of (1) its involvement to these principles and which of these principles are potentially difficult to satisfy, and then (2) in terms of its effectiveness in providing automated corrective feedback on EFL Algerian learners' written proficiency autonomy development, i.e, its relative impact on their writing process and product and on their attitudes towards the use of this tool.

Research Questions

- 1- What are the prevalent types of errors observed in the writing of Algerian EFL learners?**
 - a. How frequently do different types of writing errors occur among Algerian EFL learners?
 - b. What factors contribute to the manifestation of these writing errors?
 - c. Which tools and strategies do EFL learners use to self-correct their writing errors?
- 2- Does the incorporation of "Write and Improve", an automated error corrective feedback tool, in Algerian EFL writing classes affect learners' writing proficiency ?**

- a- To what extent can the use of “Write and Improve” foster Algerian EFL students’ writing proficiency?
- b- What are the most common writing errors detected and corrected by automated writing error correctors?
- c- What are the writing errors that remain unaddressed by automated writing error correctors?
- d- How accurate is the feedback provided by automated writing error correctors?
- e- In what ways does automated error corrective feedback differ from teacher-provided feedback?

3- Does the use of “Write and Improve” have an effect on students' autonomy in writing?

- a- How does the use of “Write and Improve” affect EFL students’ motivation to write in English?
- b- How does the use of “Write and Improve” affect EFL students’ self-directedness/teacher- independence when writing in English?
- c- How does the use of “Write and Improve” affect EFL students’ writing self-correct strategies?

4- What are EFL learners' attitudes towards the use of automated corrective feedback in the writing process?

- a- How do EFL learners interact with automated corrective feedback while engaging in English writing?
- b- To what extent do EFL learners employ Automated Writing Error Correctors to rectify their writing errors and enhance their autonomy?
- c- How effectively do EFL learners utilize automated writing error correctors to refine their writing skills?

- d- What factors might influence students' engagement with automated feedback and their inclination towards incorporating its suggestions?

Research Hypotheses

On the basis of the aforementioned questions it is hypothesized that:

- 1- Algerian EFL students make different types of writing errors while writing and they lack self-dependent strategies to minimize these errors and improve their writing proficiency.
- 2- If it is well integrated in the EFL writing class, “Write and Improve” software will potentially minimize these errors and improve EFL students’ writing proficiency.
- 3- Sustained exposure to automated writing error correction tools and raising learners' awareness of their use might promote the uptake of feedback and nurture learners’ autonomy.
- 4- EFL Students have positive attitudes towards using “Write and Improve” software in enhancing their writing skills and autonomy.

Aims of the study

Rigid experimental research is imperative to verify hypotheses, generalize findings in specific conditions, and provide a research base for further studies (Krathwohl, 1997). Since the present study focuses on the intersection of *EFL writing*, *technology*, and *autonomous learning*, its main aim is to explore the effect of the automated writing error correctors on Algerian EFL learners writing and whether and to what extent student writing improvement, their learning autonomy and their perception of these programs are related. The study also aims to provide robust empirical findings that help EFL teachers, researchers and learners:

- 1- To identify the types and Frequency of Writing Errors: The first objective is to identify the most prevalent types of errors found in the writing of EFL learners at the University of Souk Ahras. By analyzing a corpus of learners' written work, the study aims to determine the frequency rates of different writing error types, such as grammar, vocabulary, syntax, and

spelling errors. This aim will provide valuable insights into the common linguistic challenges faced by EFL learners in their writing process.

2- Examine the factors contributing to writing Errors: The study seeks to investigate the factors that contribute to the occurrence of writing errors among EFL learners. These factors may include learners' linguistic backgrounds, language transfer issues, instructional approaches, and contextual influences. By understanding the underlying causes of writing errors, the research aims to inform targeted instructional strategies to address specific areas of difficulty.

3- To explore self-correction tools and strategies employed by EFL Learners: This study aims to explore the self-correction tools and strategies used by EFL learners to rectify their writing errors. By conducting interviews or surveys with learners, the study will gather insights into how students actively engage in the self-directed learning process and attempt to improve their writing independently.

4- To evaluate the impact of automated error correctors on writing performance and autonomy: the central objective of this study is to assess the impact of integrating automated error correctors, particularly the "Write & Improve" program by Cambridge English, in EFL writing classes. The research will evaluate the extent to which ACF influences learners' writing performance in terms of accuracy, fluency, and overall writing quality. Moreover, it aims to investigate the effect of AECF on learners' autonomy and self-regulation in the writing process.

5- To examine the accuracy and effectiveness of automated error corrective feedback: the study aims to examine the accuracy and effectiveness of the feedback provided by the "Write & Improve" program. By comparing the program's corrections with teacher-written feedback, the research seeks to evaluate the program's ability to address various types of writing errors and provide meaningful suggestions for improvement.

6- To identify the strengths and weaknesses of automated error correctors: This research focuses also on identifying the strengths and weaknesses of using automated error correctors in EFL writing instruction. By analyzing learners' experiences with ACF and the "Write & Improve" program, the study aims to gain insights into the benefits and limitations of this technology and its implications for language teaching and learning.

7- To understand EFL learners' perceptions of automated corrective feedback: this paper aims to explore EFL learners' perceptions and attitudes toward automated corrective feedback in the writing process. By conducting interviews, surveys, or focus group discussions, the study seeks to understand how learners engage with ACF, how they perceive its usefulness, and their overall acceptance of using automated error correctors in their writing practice.

8- To investigate the factors influencing students' engagement with automated feedback: The study aims to investigate the factors that influence students' engagement with automated feedback and their willingness to incorporate its suggestions. This objective will shed light on the various motivational, cognitive, and contextual factors that may impact learners' receptiveness to ACF and its role in fostering autonomous language learning.

In summary, the aims of this study are designed to provide a comprehensive understanding of the effectiveness and impact of automated error corrective feedback in EFL writing instruction. By addressing these objectives, the research aims to contribute valuable insights into the benefits and challenges of using ACF and offer practical recommendations for enhancing language education practices, specifically within the context of the University of Souk Ahras.

Significance of the Study

The significance of this study lies in its potential contributions to the fields of language education, technology integration, and EFL writing instruction at the University of Souk Ahras. The research aims to provide valuable insights and practical implications

to various stakeholders, including educators, administrators, curriculum developers, and EFL learners. The significance of this study can be summarized as follows:

1. Advancing language education practices: The study explores the effectiveness of automated error corrective feedback (ACF) in EFL writing instruction. By evaluating the "Write & Improve" program and its impact on learners' writing performance, the research can inform language educators about the benefits and limitations of integrating technology in writing classrooms. The findings may guide the integration of ACF tools in the language curriculum and facilitate evidence-based decisions in language education practices.
2. Enhancing writing proficiency: Understanding the most prevalent writing errors among EFL learners and the factors contributing to these errors can lead to targeted instructional interventions. By addressing specific areas of difficulty, educators can design tailored writing instruction that caters to learners' needs, ultimately fostering improvements in writing accuracy, fluency, and overall proficiency.
3. Promoting learner autonomy: Investigating learners' perceptions and experiences with automated corrective feedback will shed light on the role of ACF in promoting learner autonomy (Li & Li, 2018; Zhang & Cheng, 2019). By examining how learners engage with ACF and utilize it for self-correction, the study can offer insights into learners' self-regulation and metacognitive processes. These findings may contribute to the design of learner-centered approaches that empower students to take more ownership of their language learning journey.
4. Informing technology integration: The study's examination of the accuracy and effectiveness of automated error correctors can contribute to the development and improvement of ACF tools. Identifying the strengths and weaknesses of ACF systems can help technology developers and researchers enhance the design and functionalities of these tools to better align with learners' needs and instructional goals.

5. Tailoring feedback practices: By comparing automated error corrective feedback with teacher-written feedback, the research can provide valuable insights into the complementary roles of technology and human instructors in writing instruction. This understanding may inform educators about the appropriate balance between automated and teacher-provided feedback, leading to more effective and efficient feedback practices.
6. Informing educational policy: The findings of this study can offer evidence-based recommendations for language education policies and practices at the University of Souk Ahras and beyond. The research may influence decisions related to the integration of technology in language classrooms and the design of writing assessment and feedback mechanisms.
7. Contributing to academic literature: As research on automated error corrective feedback in EFL writing instruction is relatively limited, this study can contribute to the academic literature in the field of language education and technology-enhanced learning. The findings and insights gained from this study may inspire further research and exploration of ACF tools and their impact on language learning.

In conclusion, the significance of this study lies in its potential to enrich language education practices, enhance writing proficiency, promote learner autonomy, and inform the integration of technology in EFL writing instruction (Lee & Huang, 2018; Li & Li, 2018; Wang & Li, 2019; Zhang & Cheng, 2019). By addressing these aspects, the research aims to provide practical implications that can benefit educators, learners, and policymakers in the field of language education, particularly in the specific context of the University of Souk Ahras.

Review of Previous Studies

The field of language education is a dynamic landscape that continuously evolves with the integration of innovative strategies and technologies. To enhance the effectiveness of EFL

instruction and foster learners' autonomy, researchers and educators alike have sought to explore the impact of various approaches. In this context, a multitude of previous studies have investigated diverse aspects of language learning, ranging from error treatment and meta-linguistic instruction to feedback modalities and technology integration. These studies have significantly contributed to the understanding of how language learners can be better supported in their journey towards improved writing skills and increased autonomy. By examining the findings and insights from these studies, we gain a comprehensive perspective on the multifaceted nature of language instruction and the strategies that hold promise in enhancing EFL learners' writing abilities and autonomy.

Previous studies have delved into various aspects of language learning and instructional methods, shedding light on the effectiveness of different approaches. Hyland's seminal contribution in 2010 envisions the future avenues of feedback in the realm of second language writing. This scholarly opus adopts the form of an overview and research agenda, where the spotlight is on the dynamic evolution of feedback practices within language education. Imbued with a forward-looking spirit, this work transcends the temporal confines of its publication to cast light on the ongoing metamorphosis of feedback methodologies. By sketching the contours of potential trajectories, Hyland's scholarly expedition assumes the role of a compass guiding the navigation of feedback's uncharted waters.

Ferris (2011) discusses the treatment of error in second language student writing, providing insights into strategies for addressing errors and enhancing writing skills in language learners. This work contributes to the broader understanding of error correction methodologies.

In the realm of teaching Chinese prosody, Li (2017) explores the potential benefits of combining meta-linguistic instruction and task repetition. This study offers valuable insights

into instructional approaches that can enhance language learning outcomes, extending beyond traditional error correction methods.

Tan, Cho, and Xu (2022) contribute to the field by investigating the effects of various feedback modes on EFL learners' writing performance. Their study delves into the impacts of automated written corrective feedback, computer-mediated peer feedback, and a combination of both approaches. This research adds depth to our understanding of the role of technology-mediated feedback in writing instruction.

Woodworth and Barkaoui (2020) offer perspectives on the utilization of automated writing evaluation systems to provide written corrective feedback in ESL classrooms. Their work examines the practical implementation of automated systems and their implications for language teaching. This research provides insights into the challenges and benefits associated with incorporating technology into language education.

Previous studies in the realm of EFL writing instruction have extensively explored the effects of various modes of corrective feedback on learners' writing accuracy and development. Ko (2022) delved into the realm of individualized corrective feedback delivered online, investigating its impact on EFL learners' grammatical error correction. The study shed light on the effectiveness of this personalized feedback approach, revealing its potential to facilitate learners' error correction skills and contribute to overall writing improvement.

Barrot (2023) further contributed to this discourse by examining the utilization of automated written corrective feedback within writing classrooms. The study's focus on second language (L2) writing accuracy underscored the potential of automated feedback to enhance learners' precision in writing. By integrating automated feedback systems, Barrot demonstrated the feasibility of this technological approach in fostering accuracy and linguistic development in EFL writing.

Lu, Li, and Li (2015) directed their attention to automated writing evaluation (AWE)-based corrective feedback and its influence on developing EFL learners' writing skills. Their findings highlighted the significant role of AWE systems in providing tailored corrective feedback, leading to improvements in learners' writing proficiency. The study emphasized the potential of technology-driven interventions in addressing specific writing issues and enhancing overall writing competence.

Yang, Gao, and Shen (2023) delved into the interaction dynamics between EFL learners and artificial intelligence-programmed automated writing evaluation feedback. Their exploratory study unveiled insights into how learners engage with and respond to AI-generated feedback. This investigation illuminated the potential of AI-driven feedback to engage learners in reflective writing practices, thus contributing to the enhancement of their writing skills.

In the ever-evolving landscape of language learning, the integration of technology, specifically automated corrective feedback tools, has become a prominent focal point. Shadiev and Feng (2023) conducted an extensive review study to provide insights into the utilization of automated corrective feedback tools in language learning contexts. Their examination encompassed a broad range of approaches, shedding light on the multifaceted impact of such tools. The study underlines the significance of technology-driven feedback mechanisms in shaping language learners' development and lays the groundwork for a comprehensive understanding of their role in enhancing language acquisition.

Similarly, Fan (2023) embarked on an exploration into the effects of automated written corrective feedback on the writing quality of EFL students. Employing a mixed-methods approach, the study delved into the intricate dynamics between automated feedback and EFL students' writing quality. By probing both quantitative and qualitative data, Fan offered a nuanced perspective on the potential benefits and limitations of automated feedback in

influencing EFL students' writing outcomes. This study enriches our comprehension of the interplay between technology-driven interventions and writing proficiency in language learning contexts, contributing to the ongoing conversation on effective language pedagogy.

The convergence of these studies illuminates the intricate relationship between technology, automated corrective feedback, and language learning outcomes. Shadiev and Feng's comprehensive review underscores the pervasive influence of such tools across various language learning settings, while Fan's mixed-methods investigation provides a deeper insight into their tangible effects on EFL students' writing quality. Collectively, these studies underscore the significance of harnessing technology to augment language learning experiences, fostering both efficiency and efficacy in the journey toward linguistic competence.

Koltovskaia (2020) delved into the intricate realm of student engagement with Grammarly's automated written corrective feedback (AWCF) through a multiple case study approach. By closely examining student experiences, the study offers insights into how learners interact with automated feedback systems, unraveling the dynamics that influence their engagement and usage patterns. Koltovskaia's work deepens our understanding of the human-technology interaction within the AWCF landscape.

Sanosi (2022) contributed to this discourse by investigating the impact of automated written corrective feedback on the accuracy of English as a Foreign Language (EFL) learners' academic writing. This study scrutinized the tangible outcomes of integrating AWCF into academic writing practices. Through rigorous analysis, Sanosi unveils how automated feedback mechanisms can shape the accuracy of EFL learners' writing endeavors, providing valuable insights into the potential of AWCF to enhance specific language skills.

Meanwhile, Rouhi, Dibah, and Mohebbi (2020) ventured into the intricate dynamics of giving and receiving written corrective feedback in the context of improving second language

(L2) writing accuracy. Their study examined whether the act of providing and receiving feedback yields equitable mutual benefits. By exploring this reciprocity, the study provides a nuanced understanding of the potential symmetrical gains that can arise from feedback interactions, offering a perspective that contributes to the ongoing discussions on feedback dynamics within language education.

The realm of automated writing evaluation (AWE) tools has become a focal point of investigation, captivating the attention of scholars seeking to understand their implications for the enhancement of writing skills. Parra and Calero (2019) delve extensively into the influential domain of AWE tools, probing their potential to augment the refinement of writing abilities. Through their meticulous exploration of the practical application of these tools, the study amplifies their role in propelling skill development. This investigation offers a significant avenue for educators and practitioners to glean insights, navigating the intricate nexus between technology and the cultivation of writing proficiency.

Mohsen's (2022) illuminating work takes the form of a meta-analysis, where the focus is on the integration of computer-mediated corrective feedback to fortify second language (L2) writing skills. By engaging in a synthesis of prevailing research, this study unveils a panoramic view of the cumulative effects emanating from interventions involving corrective feedback. Within this comprehensive panorama, the findings underscore the collective impact of employing technology-mediated feedback mechanisms to elevate L2 writing competencies. This contribution significantly enriches the empirical landscape, deepening our comprehension of the potency of this approach.

In the academic tapestry of English as a Second Language (ESL) and English as a Foreign Language (EFL) instruction, Chong (2019) weaves a meticulously woven tapestry of investigation through a systematic review of written corrective feedback research. This scholarly endeavor encompasses an exhaustive scrutiny of diverse literature to uncover the

intricate threads of common themes and revelations. The fruits of this analytical labor offer a comprehensive comprehension of the different dimensions of written corrective feedback. Within this design, the study meticulously delineates both the strengths and limitations of such feedback mechanisms within the ESL/EFL pedagogical landscape.

Hibert (2019) undertakes an ambitious quest through a systematic literature review, placing automated writing evaluation (AWE) in the crucible of formative learning tools. This exploration centers on the fusion of AWE with the learning continuum, investigating its transformative potential within the educational milieu. The resultant illumination from this scrutiny amplifies the ways in which AWE can be harnessed as a dynamic instrument to impart meaningful learning experiences. Amid the currents of the modern educational ecosystem, this work stands as a navigational beacon for educators seeking to leverage AWE for pedagogical enrichment.

Amid the evolving landscape of language education, a surge of interest surrounds the integration of Automated Writing Evaluation (AWE) tools. Schlosser (2023) embarks on a journey to raise university students' awareness of AWE tools in the context of English as a Foreign Language (EFL) writing classrooms. This endeavor seeks to illuminate the path toward promoting feedback uptake and learner autonomy. The hypothesis underlying this study rests on the premise that enhancing students' awareness of AWE tools can stimulate a more active engagement with feedback, consequently fostering greater learner autonomy.

Shiyao (2021) contributes to this tapestry by delving into the effects of automated writing corrective feedback on second language (L2) writing accuracy across different proficiency levels. The study is grounded in the hypothesis that the impact of automated corrective feedback may vary based on learners' proficiency levels. The findings of this investigation enrich our understanding by unveiling the nuanced relationship between automated feedback and L2 writing accuracy across diverse proficiency strata.

Li, Link, and Hegelheimer (2015) engage in a thought-provoking examination of the role of AWE feedback within English as a Second Language (ESL) writing instruction. Their hypothesis centers on the belief that the utilization of AWE feedback is evolving from a mere corrective mechanism to a catalyst for fostering metacognition and strategic thinking. This innovative perspective is fortified by their findings, which underscore the transformative potential of AWE feedback in enriching ESL writing instruction.

Megawati, Kadarisman, and Agustina (2022) delve into the realm of corrective feedback implementation in EFL writing classes. Their study seeks to unravel the multifaceted dynamics of how corrective feedback is operationalized. The hypothesis underlying their inquiry posits that the efficacy of corrective feedback hinges on the alignment between instructional strategies and students' learning needs. Through their meticulous exploration, the findings paint a vivid picture of the intricate interplay between instructional design and corrective feedback effectiveness.

Wang (2022) turns the spotlight onto the effect of automated corrective feedback on second language (L2) writing, specifically within the realm of Part-of-Speech (POS) categories. The study's hypothesis centers on the assumption that automated corrective feedback can have a discernible impact on L2 writing accuracy, particularly when applied to specific linguistic components such as POS categories. Wang's findings contribute to our comprehension of the targeted impact of automated feedback on specific linguistic dimensions within L2 writing contexts.

Thus, these studies navigate the dynamic landscape of AWE tools, illuminating diverse facets of their impact within language education. Through innovative hypotheses and insightful findings, these investigations weave a rich tapestry that informs educators and researchers alike, forging pathways toward enhanced writing pedagogy and learner development.

Collectively, these studies provide a comprehensive overview of the diverse approaches and technologies utilized to provide corrective feedback in EFL writing instruction. The findings underscore the potential of individualized online feedback, automated systems, and AI-generated feedback to contribute significantly to learners' writing accuracy, skill development, and engagement with the writing process. These insights contribute to the ongoing conversation surrounding effective EFL writing pedagogy and highlight avenues for fostering learners' autonomy and proficiency in written communication.

Research Methodology and Design

Population and Sample

Studies cannot be carried out with the whole population, and so for the sake of easing the task researchers opt for a selected category then generalize the results obtained by testing the sample on the whole group concerned. Sampling is the selection of some parts from a whole on the basis of which assumptions are made (Kothari, 2004).

In the present study, the sample is selected from first year LMD students of the department of English at MCMU- Souk Ahras. At this level, most Algerian learners show little competence in English compared to the amount of instruction they have had. They are mainly weak at productive skills, and thus they are unable to express themselves neither fluently nor accurately, both in speech and in writing. These students consider English to be a difficult subject-matter, and perceive writing as even more difficult. Writing requires from them knowledge of grammar, vocabulary as well as organizational rules of ideas; thus writing is viewed as an anxiety generating activity for learners, so they do not like it (Tsui, 1996). Many students at this level do not submit their writing homework, or are reluctant to do the writing activities in class; and even if they do, their written products are of poor quality at all linguistic levels because they are neither able to use accurately the sentence structures, the writing mechanics i.e. spelling, punctuation capitalization etc. nor equipped with the writing

strategies required when undertaking a writing task i.e. taking notes, planning, organizing, drafting, revising and editing. In addition, in large classes with mixed abilities as it is the case of most of our universities, students have fewer opportunities for self-expression or individual help on the part of the teacher. More details about the sampling procedures are provided in chapter four that is devoted to research methodology.

Research Methodology

The choice of the research method is shaped by the nature of the inquiry itself. It is the topic being under investigation that decides about the methods to be used to prop up the task. The most essential step in any research is the selection of an appropriate methodology to be the blue print for further progress (Khan, 2008). Researchers rely on a multiplicity of methods ranging from quantitative and qualitative to a combination of both known as mixed research approach. Creswell clarifies that while the researcher opts for the qualitative method he is to: *“build a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting.”* (Cited in Klenke, 2008:7). Hence, it relies mainly on interpreting data in its naturalistic setting. Concerning the quantitative research method, it depends on the mathematical analysis of numerical data. A blending of the two methods results in the mixed research technique which incorporates qualitative and quantitative processes for reasons of authentication (Creswell & Clarck, 2011). The current enquiry resorts to a mixed-method triangulation design in the sense that the researcher opts for the use of questionnaires with students and teachers, structured interviews.

Data Gathering Tools

Different research tools can be used to collect information depending on the scope of the enquiry. The formation of the suitable data gathering tools is a necessary move that any researcher is required to get through; these tools might vary in terms of complexity, scheme and analysis. This step must be executed accurately and each tool is supposed to fit with the

gathering of certain kinds of data (Khan, 2008). The present investigation resorts to the use of four main tools to gather data, a students' pre-test questionnaire about their writing difficulties, two writing proficiency tests, and a students' post-test interview about their attitudes towards their use of ACF in their writing tasks. In addition, a classroom observation took place within a quasi-experimental setting for the aim of getting deeper information about the students' actual practices during an automated corrective feedback-based writing instruction.

First, a questionnaire was distributed to students being the category most concerned with the objective of the study. They are to answer a variety of questions swinging between close and open ended ones. According to Anderson and Arsenault (2002) a questionnaire; if well devised; allows for a range of reliable and valid information in a well-timed period. Second, an experiment was conducted with a representative sample from first year LMD classes with the intention to gather information about the students' writing level of proficiency before and after the incorporation of ACF tools in their writing tasks. The experiment is meant to generate the same results with groups that were not meant to be part of it (Mallick & Verma, 2005). Third, the study makes use of the interview as well for students. In the case of students, the interview is helpful in getting deeper data that cannot be gotten through the use of the questionnaire. The study population is likely to speak directly to the interviewer because direct questioning gives for a better attention from both sides (Wood & Ross-Kerr, 2011). If the researcher knows how to manipulate the exchange, he can dig deeper into the required type of information.

A participant observation took place as well while conducting the experiment, this type of research tool requires the researcher to be fully immersed in the day to day activities of the participants in the study setting (Flick, 2009). The observation permits for a prompt account

of students' development in the variables being under investigation and provides a structured sketch for the confirmation or denial of the stated hypotheses.

More details about the different data collection sampling, procedures, objectives, piloting, administration and analysis were thoroughly discussion later in chapter four

Structure of the Study

The thesis is organized into a general introduction, five main chapters, and a general conclusion. Each of these parts contribute to a comprehensive understanding of the effect of automated error corrective feedback on the improvement of EFL learners' writing and autonomy among first-year students at the University of Souk Ahras.

The general introduction sets the stage for the study by introducing the research topic and its significance in the context of language education. It presents the research problem, research questions, and objectives, along with an overview of review of the previous related studies. The chapter also outlines briefly the research design and the structure and of the thesis.

The first chapter entitled "Writing skills and learners' writing autonomy" presents an extensive review of relevant literature related to the writing skill and EFL learners' autonomy in EFL writing instruction. It is divided into two sections. The first section tackles the nature of the writing skills, different types of writing, and a description of the writing framework. Additionally, the chapter delves in the learning and teaching of writing, shedding the light on teaching writing approaches, teaching writing strategies and writing evaluation. Also the factors contributing to EFL learners' constraints in writing were discussed in this section. The second section of the first chapter is devoted to learners' autonomy in EFL writing. The theoretical framework of learner autonomy in language learning was presented with emphasis on how autonomy shapes language learning and autonomy approach in language education. Specific interest was devoted to the correlation between the learners' autonomy

and their writing proficiency development. The section also discussed the factors influencing learners' autonomy in writing and the evolving role of the teacher in decreasing these factors and fostering learners' autonomy in EFL writing. The section ends with exploring teachers' and learners' perceptions of autonomy in EFL writing.

The second chapter entitled "feedback in language learning and teaching" is an intermediary chapter between the first and third ones. Before talking about automated corrective feedback, it is important to examine the nature of feedback, its different types and the main strategies used for effective implementation of feedback in EFL writing. These are the main axes of the second chapter in addition to its emphasis the students' perceptions of feedback and the motivational aspect of this later on learners' writing development.

The third chapter is concerned with "automated error corrective feedback". It is also divided into two sections. The first section is dedicated to explore ACF feedback in EFL writing. It is introduced by referring to technology integration in EFL learning, ICTs and computer assisted language learning (CALL). Then, the main characteristics of ACF were discussed explaining how these systems identify errors, how should they be integrated in EFL instructional contexts effectively, and the factors influencing its effectiveness. Furthermore, the relation between learners' autonomy and ACF use is discussed with the students' perceptions of ACF. The section ended with a deep comparison between ACF and teacher feedback. The second section presents an overview of "Write & Improve" tool. It provides a guide to operate it, its main features, and the areas in which "Write & Improve" is used.

The fourth chapter delineates the research design and methodology employed in the study. It outlines the research approaches, data collection methods, participant sampling, and data analysis techniques. The chapter also discusses the ethical considerations taken into account during the research process.

The fifth chapter presents the empirical findings obtained from the data collected during the study. It includes the analysis of the types and frequency of writing errors among the participants, the comparison between automated and teacher-written feedback, and the assessment of learners' perceptions and engagement with automated corrective feedback. The findings are discussed in light of the research questions and objectives.

Finally, the research is ended up with a general conclusion, in which the research findings were discussed in detail, with reference to the relevant literature. The implications of the study's results for language education, technology integration, and learner autonomy were also presented. Furthermore, practical recommendations for educators and policymakers were suggested.

By organizing the thesis into these five cohesive chapters, the study aims to present a systematic and coherent exploration of the impact of automated error corrective feedback on EFL learners' writing and autonomy. The progression from introduction to conclusion facilitates a clear and comprehensive understanding of the research findings and their significance in the field of language education.

Chapter One

Chapter One: Writing Skills and Writing Autonomy

Section One: Writing Skills

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Chapter One: Writing Skills and Autonomy

In EFL instruction context, Writing is considered one of the most difficult skills for EFL students to acquire, because they frequently make mistakes in their academic writing. Despite the tireless efforts of writing teachers to alleviate the complexity of learning the writing skill for EFL students, they are still facing obstacles while writing, and they are required to rely on themselves in enhancing their writing proficiency autonomously. In this regard, the present chapter is devoted mainly to explore the nature of this challenging skill. It is designed in two main sections.

The first section delves into the fundamental aspects related to the development of writing skills among (EFL) learners. It sets the foundation for the research by exploring the nature of the writing skill, the significance of writing in language education, the different types of writing, and the various approaches used to teach writing. Additionally, it examines the factors that contribute to EFL learners' constraints in writing and the methods of assessing written language.

In the second section, the research focuses on EFL learners' autonomy in writing, shedding the light first, on the definition of autonomy and its significance in language learning in general, then, the relation between, autonomy and language writing development and quality, in particular, is referred to. In addition to highlighting the evolving role of teachers in fostering autonomy in EFL writing, the factors influencing learner autonomy in writing are thoroughly discussed, and the teachers and learners' perceptions of writing autonomy in EFL classes are mentioned from the existed literature

Section One: Writing Skill

Nature of Writing Skill

Writing skill is the ability to express thoughts, ideas, and information logically and effectively through written language (Graham & Perin, 2007). It entails mastering linguistic, cognitive, and social processes in order to develop written works that transmit meaning, engage the audience, and deliver the writer's intended message (Kellogg, 2008). Grammar, vocabulary, sentence structure, organization, style, and coherence are all components of writing proficiency (Graham & Perin, 2007).

A proficient writer possesses knowledge of *language conventions and rules*, enabling them to construct grammatically correct and meaningful sentences (Graham & Perin, 2007). They have a wide range of *vocabulary* at their disposal, enabling them to choose the most appropriate words to convey precise meanings and emotions (Berman & Cheng, 2010). Additionally, skilled writers understand how to structure their writing to create a clear and logical flow of ideas, ensuring that the reader can follow the narrative or argument effortlessly (Hayes, 2012).

Writing skill extends beyond mere technical proficiency, it also involves creativity and originality in expressing ideas (Kellogg, 2008). A skilled writer can use literary devices, figurative language, and vivid imagery to make their writing more engaging and impactful (Berman & Cheng, 2010). They can adapt their writing *style* to suit different genres and audiences, demonstrating flexibility in their approach to various writing tasks (Kellogg, 2008).

One important aspect of writing skill is the ability to effectively *organize and structure* ideas within a written piece. This involves creating a clear introduction, developing coherent paragraphs, and providing a logical progression of thoughts. Skilled writers *employ strategies* such as outlining, creating topic sentences, and using transitional words and phrases to ensure

a smooth flow of information (Graham & Perin, 2007). They also understand the importance of maintaining *coherence and cohesion* throughout the text, ensuring that ideas are connected and relevant to the overall purpose of the writing (Bereiter & Scardamalia, 1987).

Additionally, skilled writers demonstrate a strong command of *language conventions*, including grammar, punctuation, and spelling. They understand the rules of grammar and can apply them accurately, resulting in clear and understandable writing (Graham & Perin, 2007). They also pay attention to *punctuation marks* and use them effectively to enhance meaning and clarity. Furthermore, proficient writers have a good grasp of *spelling* and employ strategies such as proofreading and using spell-check tools to ensure accuracy (Graham & Perin, 2007).

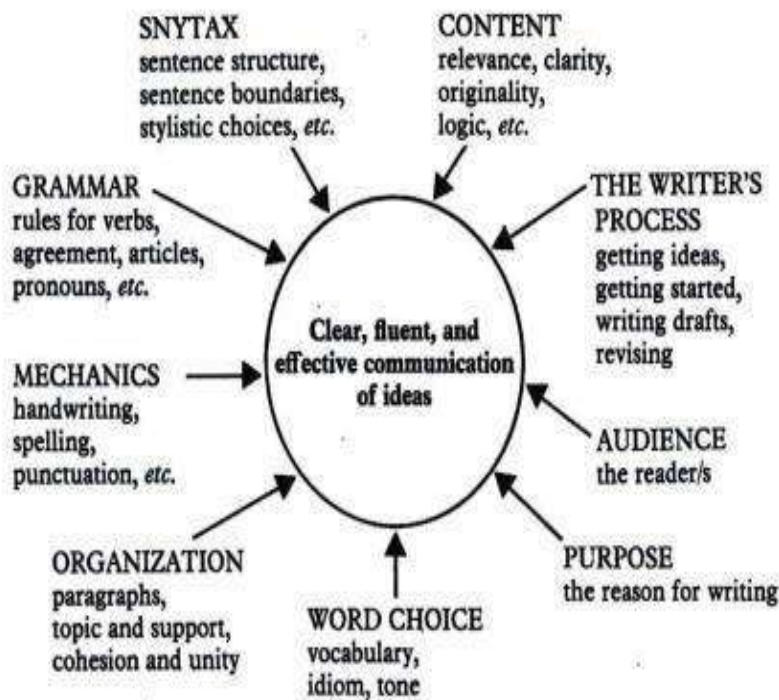
Another crucial aspect of writing skill is the development of a unique *writing style*. Skilled writers have the ability to adapt their writing style to different purposes and audiences. They understand the tone, voice, and register appropriate for various genres, whether it be academic writing, creative writing, or professional communication (Kellogg, 2008). Through practice and exposure to diverse texts, writers develop their own voice and individuality, which distinguishes their writing and makes it more engaging and authentic.

Furthermore, writing skill is a dynamic ability and a continuous process that evolves and improves over time through practice, *feedback and revision* (Graham & Perin, 2007). Skilled writers understand the importance of revising and editing their work to improve clarity, coherence, and overall quality. They engage in *self-reflection*, seeking opportunities to refine their writing through self-assessment and incorporating feedback from peers, instructors, or editors (Hayes, 2012). This iterative process of writing and revising allows writers to refine their ideas, strengthen arguments, and enhance the overall impact of their written work.

In conclusion, writing skills encompass multiple dimensions, including organization, language conventions, style, and revision. Proficient writers possess the ability to structure their ideas effectively, demonstrate mastery of language conventions, adapt their writing style to different contexts, and engage in continuous improvement through revision and feedback. Developing strong writing skills empowers individuals to communicate effectively, think critically, and contribute meaningfully to academic, professional, and personal domains.

Figure 1

Producing a Piece of Writing (Raimes, gj _ç 1983, p.6)



Types of Writing

Writing is a multifaceted skill that plays a crucial role in communication and expression across various domains. One of the fascinating aspects of writing is its versatility, allowing individuals to convey their thoughts, emotions, and ideas through different forms and genres. Each type of writing serves a specific purpose and audience, presenting a unique set of challenges and opportunities for writers. From informative expository writing to captivating creative works, the diversity of writing types enables writers to explore a wide spectrum of styles and techniques. In this chapter, we will delve into the different types of writing, examining their defining characteristics and the various ways they enrich our understanding of the written word.

Expository Writing

Expository writing is a type of writing that is primarily focused on conveying information, explaining concepts, or presenting facts in a clear and objective manner (McWhorter, 2014). The main purpose of expository writing is to inform and educate the readers about a specific topic or subject (McWhorter, 2014). Unlike creative writing, which allows for more imaginative and subjective expression, expository writing adheres to a more structured and formal style of communication.

Characteristics of Expository Writing

Clarity. One of the key characteristics of expository writing is clarity. The language used in this type of writing is straightforward and unambiguous, aiming to avoid any confusion or misinterpretation of the information presented. It relies on concise and well-organized sentences to ensure that the readers can easily grasp the content (McWhorter, 2014).

Facts and Evidence. Expository writing relies heavily on presenting facts, evidence, and data to support the information being conveyed. The writer must provide credible sources

and authoritative references to back up the claims made in the text, enhancing the credibility of the information (McWhorter, 2014).

Logical Organization. Expository writing follows a logical organization, typically using a clear and coherent structure to present the information. It often employs formats such as cause and effect, problem-solution, or chronological order to facilitate understanding and retention of the content (McWhorter, 2014).

Objectivity. Expository writing is neutral and objective in tone. The writer avoids personal opinions or biases and maintains a factual and impartial perspective. The focus is on providing an unbiased account of the topic, allowing readers to form their own judgments based on the presented information (McWhorter, 2014).

Examples of Expository Writing

Textbooks and Educational Materials. Expository writing is commonly found in textbooks, educational materials, and academic papers. These texts aim to explain complex concepts, theories, and subject matter to students and readers (McWhorter, 2014).

News Articles. News articles often employ expository writing to report on current events, providing readers with relevant information in a straightforward manner (McWhorter, 2014).

Scientific Reports. Scientific reports and research papers use expository writing to present findings and observations based on data and experiments conducted during research studies (McWhorter, 2014).

How-To Guides. Instructional manuals, how-to guides, and technical documentation employ expository writing to provide step-by-step instructions and information on various processes and tasks (McWhorter, 2014).

Encyclopedia Entries. Encyclopedia entries are examples of expository writing, providing concise and factual explanations of various topics and subjects (McWhorter, 2014).

The Importance of Expository Writing

Expository writing plays a crucial role in education, communication, and information dissemination. It serves as a foundational skill in academic settings, helping students develop critical thinking and research abilities. Moreover, expository writing is vital in professional environments, where clear and concise communication is essential for sharing knowledge and ideas (McWhorter, 2014).

In summary, expository writing is a vital form of written communication that informs, educates, and conveys information in a clear, objective, and organized manner. By presenting facts and evidence, it enhances understanding and promotes informed decision-making in various fields and disciplines.

Descriptive Writing

Descriptive writing is a genre of writing that aims to create a vivid and detailed portrayal of a person, place, object, or event through the use of sensory details and sensory language (Nordquist, 2021). It is often used in creative writing, literature, and certain forms of academic writing to engage the reader's imagination and evoke a sensory experience.

Characteristics of Descriptive Writing

Sensory Details. Descriptive writing relies on sensory details to paint a vivid picture in the reader's mind. Writers use sensory language to engage the reader's senses of sight, hearing, touch, taste, and smell, allowing them to experience the subject being described (Nordquist, 2021).

Figurative Language. Descriptive writing often employs figurative language, such as similes, metaphors, and personification, to enhance the description and create a more vivid and imaginative portrayal (Nordquist, 2021).

Specific Language. Descriptive writing uses specific and precise language to convey the details of the subject being described. Instead of using general or vague terms, writers

choose words that are rich in meaning and create a clear image in the reader's mind (Nordquist, 2021).

Organization. Descriptive writing typically follows a logical organization, which may be based on spatial order, chronological order, or a specific pattern that enhances the description (Nordquist, 2021). This helps the reader follow the writer's description and visualize the subject more easily.

Examples of Descriptive Writing

Creative Writing. Descriptive writing is commonly used in creative writing, such as short stories, novels, and poetry, to create vivid and immersive settings, characters, or scenes (Nordquist, 2021).

Travel Writing. Travel writers often employ descriptive writing to transport readers to different locations, describing landscapes, cultures, and experiences in a way that allows readers to feel as if they are present (Nordquist, 2021).

Nature Writing. Nature writers use descriptive writing to capture the beauty and intricacies of the natural world, describing landscapes, flora, fauna, and natural phenomena in vivid detail (Nordquist, 2021).

Personal Essays. In personal essays, descriptive writing is often used to convey personal experiences, memories, or emotions, creating a sensory and emotional connection with the reader (Nordquist, 2021).

Scientific Writing. In scientific writing, descriptive language is used to provide accurate and detailed descriptions of observations, experiments, or research findings, allowing readers to visualize the scientific concepts being discussed (Nordquist, 2021).

Importance of Descriptive Writing

Descriptive writing serves several purposes across different contexts. In creative writing, it helps engage readers' imaginations, making the narrative more immersive and

enjoyable. In academic writing, descriptive language can enhance the clarity and precision of scientific or technical descriptions. Additionally, descriptive writing plays a crucial role in literature, enabling authors to create vivid and memorable characters, settings, and scenes that resonate with readers.

In summary, descriptive writing is a genre that employs sensory details, figurative language, and specific language to create a vivid and immersive portrayal of a subject. It is used in various forms of writing to engage readers' senses and imagination, providing a rich and detailed experience.

Narrative Writing

Narrative writing is a form of writing that tells a story or recounts a series of events, experiences, or personal anecdotes (Hallett & Link, 2019). It is characterized by its narrative structure, which includes elements such as characters, setting, plot, conflict, and resolution. The primary purpose of narrative writing is to entertain, engage, and evoke emotions in the readers by taking them on a journey through a compelling and well-crafted story.

Characteristics of Narrative Writing.

Storytelling. Narrative writing revolves around storytelling, and it often employs a narrative voice or point of view to convey the events. The writer may use first-person, second-person, or third-person narration, depending on the desired effect and perspective (Abdel-Hack & Helwa, 2004)."

Setting and Descriptions. Narrative writing sets the scene by describing the setting, time, and place where the events occur. Vivid and detailed descriptions bring the story to life, allowing readers to immerse themselves in the world of the narrative (Moon, 2022).

Characters. Characters are central to narrative writing. They are the individuals who drive the story forward and engage readers on an emotional level. Well-developed and relatable characters add depth and authenticity to the narrative (Livelybrooks, 2014)

Plot and Conflict. Narrative writing follows a plotline that comprises a series of events or incidents. The plot unfolds through rising action, climax, and resolution. Additionally, a conflict or challenge faced by the characters adds tension and excitement to the story (Varotsis, 2018).

Dialogue. Dialogue plays a significant role in narrative writing, as it allows characters to interact and communicate with one another. Conversations and exchanges of dialogue reveal the characters' personalities, motivations, and emotions (Joyce, 2008).

Examples of Narrative Writing (Ferrari, 2015).

Novels and Short Stories. Novels and short stories are classic examples of narrative writing. Authors use these formats to weave intricate and captivating tales that transport readers to different worlds and experiences.

Memoirs and Autobiographies. Memoirs and autobiographies are forms of narrative writing that recount personal experiences, memories, and life journeys.

Fictional and Historical Accounts. Fictional and historical accounts utilize narrative writing to present imaginative stories set in fictional worlds or to retell historical events with a creative narrative.

Folktales and Fairy Tales. Folktales and fairy tales are traditional narrative writings that have been passed down through generations. They often feature fantastical elements and teach moral lessons.

Personal Narratives. Personal narratives are short pieces of narrative writing where individuals share their personal experiences, emotions, and reflections.

The Importance of Narrative Writing

Narrative writing is a powerful tool for human expression and communication. It fosters creativity, empathy, and critical thinking as readers engage with the characters' emotions and

perspectives. Furthermore, narrative writing allows individuals to connect with their own experiences and explore universal themes of human existence.

In conclusion, narrative writing breathes life into stories, transporting readers to different worlds and touching their hearts. Through captivating storytelling, it provides entertainment, inspiration, and a deeper understanding of human experience.

Persuasive Writing

Persuasive writing is a dynamic form of communication designed to sway the audience's opinions, beliefs, or actions by presenting compelling arguments and evidence (Hillocks, 2011). Unlike other types of writing that focus on providing neutral information, persuasive writing aims to convince the reader to adopt the writer's perspective or take a specific course of action.

Characteristics of persuasive writing.

Clear Position. Persuasive writing begins with a strong and unequivocal thesis statement that clearly states the writer's stance on the issue (Perelman & Olbrechts-Tyteca, 1969).

Strong Evidence. The effectiveness of persuasive writing lies in the presentation of credible evidence, facts, statistics, and expert opinions that support the writer's claims. These pieces of evidence build a persuasive case for the argument (Kiefer, 2012).

Appeals to Reason. Logical reasoning is a crucial element of persuasive writing. The writer constructs a coherent argument by connecting evidence and using logical chains of thought (Toulmin, 2003).

Emotional Appeal. Persuasive writing often appeals to the reader's emotions, aiming to evoke feelings such as empathy, compassion, or concern. This emotional connection can reinforce the persuasive impact of the message (Perloff, 2017).

Counterarguments and Refutation. Addressing potential counterarguments demonstrates a comprehensive understanding of the topic. The writer anticipates opposing viewpoints and effectively refutes them, strengthening their position (Fish, 1980).

Rhetorical Devices. Persuasive writing utilizes rhetorical devices such as metaphors, analogies, and rhetorical questions to enhance the impact and memorization of the message (Corbett, 1990).

Examples of Persuasive Writing (Uccelli et al., 2013)

Opinion Columns. Opinion pieces in newspapers and magazines often employ persuasive writing to present viewpoints on current events or issues.

Political Speeches. Political speeches aim to persuade voters by presenting a candidate's platform and convincing arguments.

Advertising. Advertisements use persuasive writing to convince consumers to purchase a product or service.

Debates and Argumentative Essays. In formal debates and argumentative essays, participants use persuasive writing to advocate for their position on a given topic.

Public Service Announcements (PSAs). PSAs utilize persuasive writing to encourage positive behaviors or social changes.

Importance of Persuasive Writing

Persuasive writing equips individuals with the ability to influence opinions, advocate for causes, and effect change. Mastering persuasive writing is crucial in various fields, including politics, business, law, and advocacy, where the power to persuade is a valuable skill. Additionally, engaging in persuasive writing enhances critical thinking and communication skills, enabling individuals to articulate their viewpoints effectively.

Creative Writing

Creative writing is a dynamic and expressive form of communication that transcends mere information dissemination, emphasizing the use of imagination, creativity, and artistic language to captivate readers and evoke powerful emotions (Lamott, 1994). It encompasses a wide range of genres and styles, allowing writers to explore and experiment with their unique voices, resulting in a diverse and vibrant literary landscape (Gardner, 1983).

Characteristics of creative writing.

Imagination and Creativity. Imagination lies at the heart of creative writing, enabling writers to construct intricate worlds, develop multifaceted characters, and create captivating scenarios that transport readers beyond the confines of reality (Gardner, 1983).

Artistic Language. Creative writing employs figurative language, vivid descriptions, and literary devices to create a rich sensory experience for the reader (Pinker, 2014). By skillfully crafting words and phrases, writers paint vivid mental images, stimulating readers' senses and immersing them in the narrative.

Emotional Resonance. Creative writing delves deep into characters' emotions and experiences, aiming to evoke emotional responses from readers (Nalbantian, 2014). Through the exploration of complex human emotions, such as love, loss, and longing, writers foster empathy and forge connections with their audience.

Exploration of Themes. Creative writing encompasses a broad spectrum of themes, ranging from personal introspection and societal issues to philosophical concepts (Frye, 1957). Writers use their craft to delve into profound questions about the human condition, provoking thought and encouraging contemplation.

Personal Expression. Creative writing provides a platform for writers to express their thoughts, beliefs, and experiences in a deeply personal and introspective manner (Cameron,

1992). It serves as a means of self-reflection and self-discovery, allowing writers to articulate their unique perspectives and share them with the world.

Importance of Creative Writing

Self-Expression. Creative writing serves as a powerful means for individuals to authentically and artistically express their thoughts, feelings, and experiences (Csikszentmihalyi, 1996). It provides a creative outlet for personal expression and fosters a sense of identity and individuality.

Cognitive Growth. Engaging in creative writing enhances cognitive abilities, such as critical thinking, problem-solving, and empathy (Kaufman & Beghetto, 2009). By encouraging exploration of diverse perspectives and imaginative thinking, creative writing stimulates intellectual growth and broadens one's cognitive horizons.

Communication Skills. Through crafting compelling narratives, writers develop effective communication skills that extend beyond their writing to other areas of life (McLeod, 2017). Creative writing nurtures the ability to convey ideas and emotions clearly, fostering effective communication in various personal and professional contexts.

Emotional Catharsis. Writing creatively can provide emotional release, assisting individuals in processing and making sense of their emotions and experiences (Pennebaker, 1997). It serves as a therapeutic outlet, allowing writers to explore and confront their innermost feelings, leading to a sense of catharsis and emotional well-being.

Cultural Preservation. Creative writing plays a crucial role in preserving cultural heritage by transmitting stories, traditions, and values to future generations (Nida, 2003). Through the power of storytelling, creative writing preserves the rich tapestry of diverse cultures, ensuring their continued existence and appreciation.

In conclusion, creative writing is a profound and influential art form that enables writers to construct imaginative worlds, convey deep emotions, and connect with readers on profound

levels. It celebrates individuality, fosters personal growth, and contributes to the enrichment of literary and cultural landscapes.

The Writing Framework

The writing framework serves as the structural foundation upon which effective and coherent written communication is built. It encompasses the essential components that guide writers in organizing their thoughts, ideas, and arguments to create a well-structured and meaningful piece of writing. A solid writing framework ensures clarity, logical progression, and engagement for the reader. (Hayes & Berninger, 2014)

Key Components of the Writing Framework

Introduction

The introduction is the entry point of written work, providing context, background information, and a clear thesis statement. It engages the reader and sets the tone for the entire piece (Cumming et al., 2000).

Thesis Statement. The thesis statement is a concise declaration of the main argument or purpose of the writing. It outlines the central idea that the rest of the piece will support, expand, or explore (Cumming et al., 2000).

Body Paragraphs

The body paragraphs form the core of the writing, each addressing a specific point, idea, or argument. They are organized logically, often following a structured pattern like the Point-Evidence-Explanation (PEE) model.

Topic Sentences. Each body paragraph begins with a topic sentence that introduces the main point of the paragraph. It provides a roadmap for the reader, indicating what the paragraph will discuss.

Supporting Evidence. Within each body paragraph, writers provide supporting evidence, examples, facts, or quotations to substantiate their claims and strengthen their arguments.

Analysis and Explanation. After presenting evidence, writers analyze and explain how the evidence supports their thesis. This step helps readers understand the significance and relevance of the presented information.

Transitions. Transitions between paragraphs and sentences ensure smooth and logical flow, guiding the reader from one idea to the next. They maintain coherence and connection throughout the writing.

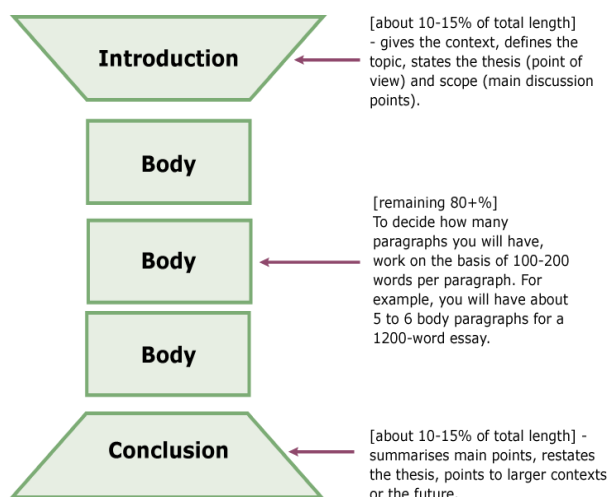
Counterarguments. In certain types of writing, addressing counterarguments or opposing viewpoints demonstrates a thorough understanding of the topic and enhances the credibility of the writer's stance.

Conclusion

The conclusion wraps up the writing by summarizing the main points, reiterating the thesis statement, and offering a final thought or reflection. It provides closure and leaves a lasting impression on the reader.

Figure 2

Writing Framework Diagram (Tribble, 1996 Page:16)



Characteristics of a Strong Writing Framework

Clarity and Understanding

A clear and well-structured framework makes the writing easy to follow and understand, ensuring that readers grasp the intended message.

Effective Communication

A solid framework enhances the writer's ability to convey ideas persuasively, effectively, and coherently to the reader.

Engagement

A logical structure and organization captivate readers, encouraging them to continue reading and explore the writer's ideas.

Guidance for Writers

The writing framework acts as a roadmap for writers, preventing them from wandering off-topic or becoming disorganized in their presentation.

Professionalism

An organized and coherent writing framework reflects the writer's professionalism, attention to detail, and commitment to delivering high-quality content.

In conclusion, the writing framework is an indispensable tool that shapes the way information is presented and understood. By incorporating the key components mentioned above, writers create a structured and compelling piece of writing that effectively communicates their ideas and engages the reader.

Writing Skill Teaching and Learning

Importance of Writing Skill in Language Learning and Communication

In educational settings, writing skills play a core task in language learning and communication, encompassing a multitude of benefits that contribute to learners' overall

language proficiency and communicative competence. Developing writing skills is essential for students as it not only enables them to communicate effectively but also supports their critical thinking and analytical abilities (Graham & Perin, 2007). Proficient writing skills are highly valued in academic, professional, and personal contexts, as individuals with strong writing capabilities can articulate complex ideas, persuade others, and contribute meaningfully to various fields of knowledge and discourse (Kellogg, 2008). Here are some of the key reasons why writing skills are of paramount importance in language learning and communication:

Expression of Ideas

Writing provides learners with a platform to express their ideas, thoughts, and emotions in a clear and structured manner. It enables them to communicate complex concepts effectively and articulate their perspectives more precisely than in spoken communication (Graham, 2018).

Reinforcement of Language Structures

Through writing, learners reinforce their understanding of grammar rules, syntax, and vocabulary usage. Engaging in writing tasks helps internalize language structures, leading to improved accuracy and fluency in both written and spoken language (Lin, 2015).

Critical Thinking and Analysis

Writing requires learners to think critically and analyze information logically before presenting it in written form. This process fosters higher-order thinking skills, enabling learners to develop analytical abilities and make well-informed arguments (Prasad, 2018).

Vocabulary Development

Writing encourages learners to explore and employ diverse vocabulary to convey their ideas effectively. As learners seek appropriate words and expressions for specific contexts, their vocabulary repertoire expands, enriching their language proficiency (Nation, 2009).

Creativity and Imagination

Writing nurtures creativity and imagination as learners compose narratives, stories, poems, and essays. This creative aspect of writing enhances learners' ability to think imaginatively and develop original ideas (Harmer, 2004).

Cultural Understanding

Writing exposes learners to the cultural aspects of the language they are learning. Through reading and writing in the target language, learners gain insights into cultural nuances, customs, and societal norms, fostering cross-cultural understanding (Byram, 1997).

Academic and Professional Advancement

Proficient writing skills are essential for academic success, as learners must produce essays, research papers, and assignments. In the professional world, effective writing is crucial for reports, emails, and other forms of written communication (Hyland, 2013).

Clarity and Coherence in Communication

Writing practice improves learners' ability to structure their thoughts coherently, leading to clearer and more organized communication. This skill enhances their overall communication abilities, benefiting both written and spoken interactions (Dempsey et al., 2009).

Self-Reflection and Growth

Writing serves as a tool for self-reflection, enabling learners to analyze their progress and identify areas for improvement. Through writing, learners can track their language development, set goals, and monitor their growth (Moon, 2006).

Lifelong Learning

Writing is a skill that continues to be valuable throughout a learner's life. As learners advance in their language journey, writing allows them to engage with more sophisticated linguistic content, fostering continuous language development (Krashen, 2009).

In conclusion, writing skills are indispensable components of language learning and communication. They facilitate the expression of ideas, reinforce language structures, foster critical thinking, expand vocabulary, and promote creativity. Moreover, writing enhances cultural understanding, supports academic and professional advancement, and encourages self-reflection and growth. As such, writing skills hold great significance in language education, empowering learners to become proficient communicators capable of navigating diverse linguistic and cultural landscapes.

Importance of Teaching Writing in a Second / Foreign Language

Teaching writing in a second or foreign language is a complex endeavor that involves navigating linguistic and cultural nuances while fostering effective communication skills (Silva & Matsuda, 2002). It encompasses strategies that address language proficiency, cultural awareness, and the development of writing skills within the context of a non-native language.

In the context of teaching writing in a second or foreign language, language proficiency and cultural sensitivity are paramount (Silva & Matsuda, 2002). Educators recognize that language learners may struggle with grammar, vocabulary, and idiomatic expressions. As a result, instructional techniques are designed to enhance learners' grasp of linguistic structures and conventions while also promoting an understanding of cultural norms that influence communication.

Teaching writing in a second or foreign language often involves bridging the gap between oral and written communication (Silva & Matsuda, 2002). Educators recognize that language learners may have a more developed speaking ability than writing ability due to everyday interactions. Instruction focuses on transferring the oral language skills to written form, helping students effectively convey their thoughts in writing.

Understanding different writing genres and their appropriate contexts is crucial in teaching writing in a second or foreign language (Silva & Matsuda, 2002). Learners need to

recognize the variations in writing styles, structures, and purposes across genres such as academic essays, emails, reports, and creative pieces. Instruction emphasizes the differences in tone, organization, and language usage based on the intended audience and purpose.

Teaching writing in a second or foreign language involves a multifaceted approach to developing writing skills (Silva & Matsuda, 2002). Educators encourage learners to engage in diverse writing tasks that focus on clarity, coherence, and organization. Activities include brainstorming, drafting, revising, and editing, mirroring the stages of the writing process. Peer review and collaborative writing activities also help learners gain insights into alternative writing approaches.

Feedback and assessment are integral components of teaching writing in a second or foreign language (Silva & Matsuda, 2002). Educators provide constructive feedback that addresses both linguistic and content-related aspects of writing. Assessment methods may include evaluating grammar, vocabulary usage, coherence, and adherence to genre-specific conventions. Additionally, educators strive to balance corrective feedback with positive reinforcement to enhance learners' motivation and self-esteem.

Teaching writing in a second or foreign language also promotes learner autonomy (Silva & Matsuda, 2002). Educators encourage students to take ownership of their learning process by setting goals, seeking resources, and reflecting on their progress. This approach empowers learners to engage actively in the writing process and make independent decisions to improve their writing skills.

Teaching Writing Approaches and Strategies

Types of teaching Writing Approaches

In the realm of language education, the art of teaching writing is a multifaceted endeavor that involves imparting not only linguistic competence but also the ability to articulate thoughts, ideas, and emotions coherently. As educators strive to cultivate proficient

writers, various teaching approaches and strategies emerge as essential tools to shape students' writing prowess. These approaches constitute a pedagogical spectrum that spans from product-oriented methods focusing on the end result to process-oriented strategies that emphasize the developmental journey. Each approach carries its distinctive philosophy and instructional techniques, catering to the diverse learning needs and preferences of students. In this exploration of the different types of teaching writing approaches, we embark on a journey to understand the nuances of these methodologies, unraveling their unique contributions in molding effective communication skills among learners.

The Product-oriented Approach. The product-oriented approach to teaching writing is a pedagogical method that places paramount importance on the final written product (Hillocks, 1986). Rooted in the belief that effective writing should adhere to established conventions of grammar, syntax, and structure, this approach aims to equip students with the skills required to produce polished, well-organized, and grammatically correct texts. The product-oriented approach aligns closely with traditional expectations of formal writing prevalent in academic and professional contexts.

Philosophy and Principles. At the core of the product-oriented approach is the notion that successful writing is characterized by its adherence to standardized linguistic norms (Hillocks, 1986). Writing is viewed as a skill that can be perfected through practice and guided instruction. The approach emphasizes teaching students the rules of grammar, sentence structure, and effective communication in written form. It assumes that once students internalize these rules and conventions, they will be better equipped to produce high-quality written work that meets the standards of correctness and clarity.

Instructional Techniques. In the product-oriented approach, writing instruction is typically structured in a linear manner, progressing through distinct stages (Hillocks, 1986). These stages include pre-writing, drafting, revising, and editing. During the pre-writing phase,

students are encouraged to plan and organize their ideas before commencing the actual writing process. Drafting involves transforming these ideas into coherent paragraphs and sentences. Revision focuses on refining content, coherence, and overall structure. The editing phase concentrates on grammar, mechanics, punctuation, and other technical aspects of writing (Yeung et al., 2017).

Teacher Role. Educators following the product-oriented approach play a pivotal role as guides and evaluators (Hillocks, 1986). They provide clear guidelines and expectations for writing assignments, specifying criteria related to grammar, syntax, and structure. Teachers may offer detailed instructions on how to organize paragraphs, craft topic sentences, and effectively use transitions. During the revision and editing phases, teachers review students' work for errors and provide feedback aimed at enhancing correctness and clarity (Hillocks, 1986).

Student Engagement. Students engaging in the product-oriented approach are expected to follow prescribed rules and guidelines for effective writing (Hillocks, 1986). They learn to apply grammatical rules and structure within the context of various writing tasks. This approach encourages a focus on precision, attention to detail, and the mastery of standard written language. Students gain the ability to produce formal essays, reports, and other written assignments that adhere to established conventions (Hillocks, 1986).

Advantages and Criticisms. The product-oriented approach offers advantages in preparing students for academic and professional writing contexts where correctness and clarity are essential (Hillocks, 1986). It equips students with a foundational understanding of formal written communication and helps them develop critical editing and proofreading skills. However, criticisms of this approach highlight its potential to stifle creativity, emphasizing correctness over personal expression and inhibiting exploration of diverse writing styles.

In conclusion, the product-oriented approach to teaching writing serves as a foundational method for equipping students with the skills necessary to produce polished and grammatically correct written works. By prioritizing adherence to linguistic conventions and emphasizing careful editing and refinement, educators employing this approach empower learners to engage confidently in formal writing situations and contribute to effective communication in academic and professional realms.

The Process-oriented Approach. The process-oriented approach to teaching writing is a pedagogical method that centers on the writing process itself rather than solely focusing on the final product (Flower & Hayes, 1981). Rooted in the belief that writing is a dynamic and iterative process involving multiple stages, this approach aims to develop students' writing skills by emphasizing creativity, self-expression, and critical thinking. The process-oriented approach aligns closely with the idea that writing is a recursive journey of drafting, revising, and refining.

Philosophy and Principles. At the heart of the process-oriented approach is the belief that writing is a complex and evolving process that involves generating ideas, exploring different perspectives, and refining one's thoughts over time (Murray, 1972). The approach rejects the notion of a linear writing process and embraces the idea that writing is best nurtured through exploration, experimentation, and revision. It values the development of critical thinking and creativity, encouraging students to engage with their own writing in meaningful and reflective ways.

Instructional Techniques. In the process-oriented approach, writing instruction is characterized by its emphasis on multiple drafts and revisions (Flower & Hayes, 1981). Students are encouraged to generate ideas freely in the initial stages, focusing on content and exploration rather than rigid adherence to conventions. The drafting phase is viewed as an opportunity for creative expression, allowing students to experiment with different writing

styles and approaches. Revising involves rethinking and restructuring the content based on feedback, self-reflection, and peer review.

Teacher Role. Educators following the process-oriented approach assume the role of facilitators and guides (Murray, 1972). They encourage students to explore their ideas, providing them with opportunities for self-expression and reflection. Teachers offer feedback during various stages of the writing process, focusing on content, organization, and coherence. The emphasis is on guiding students to develop their unique voices and encouraging them to take ownership of their writing development.

Student Engagement. Students engaging with the process-oriented approach are encouraged to embrace writing as a dynamic and evolving process (Flower & Hayes, 1981). They are empowered to explore their thoughts, ideas, and perspectives without the constraints of strict conventions during the initial drafting phase. This approach values individual expression and creativity, allowing students to experiment with various writing styles and approaches. The iterative nature of the process encourages self-reflection and growth over time.

Advantages and Criticisms. The process-oriented approach offers advantages in nurturing students' creativity, critical thinking, and reflective skills (Murray, 1972). It promotes a deeper engagement with the writing process and encourages students to view writing as a means of personal and intellectual exploration. Critics of this approach point out that its emphasis on creativity and exploration might lead to a lack of attention to proper grammar and conventions in the early stages of writing.

In conclusion, the process-oriented approach to teaching writing emphasizes the dynamic and iterative nature of the writing process (Flower & Hayes, 1981). By encouraging students to engage in multiple drafts, self-expression, and reflective thinking, educators employing this approach foster creativity and critical thinking in their students. Through this

method, students learn to appreciate writing as a journey of exploration and growth, ultimately contributing to their development as proficient and confident writers.

Figure 3

Process Approach of teaching writing (Seow, 2002, p. 315)

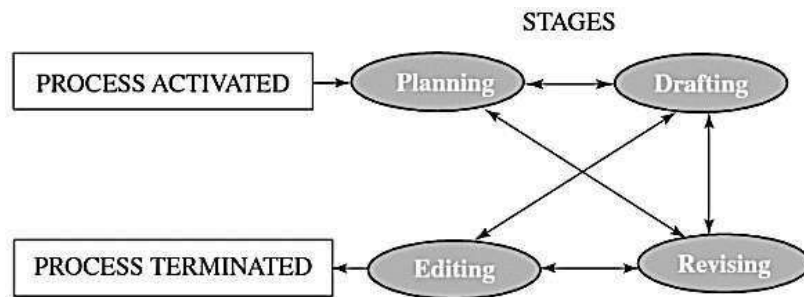


Figure 1 The Writing Process

The Genre-oriented Approach. The genre-oriented approach to teaching writing is a pedagogical method that focuses on familiarizing students with various writing genres and their associated conventions (Swales, 1990). Rooted in the belief that writing is situated within specific social and communicative contexts (Bhatia, 2004), this approach aims to equip students with the skills to effectively navigate different writing genres encountered in academic, professional, and real-world settings (Hyland, 2007).

Philosophy and Principles. At the core of the genre-oriented approach is the understanding that writing is not a uniform activity but varies according to the purpose, audience, and discourse community (Martin, 2009). This approach recognizes that different genres have distinct rhetorical structures, language features, and communicative goals (Bitchener & Basturkmen, 2006). Therefore, instead of emphasizing universal writing skills, this approach seeks to empower students with the ability to adapt their writing to the specific requirements of different genres (Hyon, 1996).

Instructional Techniques. In the genre-oriented approach, writing instruction revolves around immersing students in various genres and analyzing their characteristics (Paltridge, 2001). Educators introduce students to genres such as essays, research papers, reports, emails, and memos. Students are guided in identifying the structural components, language patterns, and purposes associated with each genre (Devitt, 2004). Instruction often involves close examination of sample texts to understand how different genres function in conveying information, persuading readers, or achieving other communicative goals.

Teacher Role. Educators following the genre-oriented approach act as facilitators who guide students in exploring and understanding different writing genres (Devitt, 2004). They provide explanations of genre conventions, facilitate discussions on genre features, and offer opportunities for students to practice writing in various genres. Teachers also help students recognize how genres are shaped by audience expectations and how adapting their writing to specific contexts enhances their communication effectiveness.

Student Engagement. Students engaging in the genre-oriented approach are encouraged to analyze, deconstruct, and mimic different genres as a means of understanding their underlying structures and purposes (Devitt, 2004). They learn to recognize the conventions of various genres and apply appropriate language and formatting conventions when composing texts. This approach promotes adaptability, enabling students to transfer their genre knowledge to new writing situations encountered in academic, professional, and personal spheres.

Advantages and Criticisms. The genre-oriented approach offers advantages in preparing students for diverse writing situations they may encounter in their academic and professional lives (Devitt, 2004). By developing genre awareness, students become skilled at tailoring their writing to specific audiences and contexts. Critics of this approach point out that an exclusive focus on genre conventions might overshadow the development of broader writing skills.

In conclusion, the genre-oriented approach to teaching writing equips students with the ability to recognize, analyze, and produce various writing genres, enhancing their adaptability and communication effectiveness (Reid, 1993). By understanding how genres are shaped by context and purpose, students become proficient in tailoring their writing to meet the expectations of different discourse communities (Bhatia, 1993).

The Process-genre Approach. The process-genre approach integrates elements of the process writing approach and the genre-based approach (Johns, 2008). It views writing as both a recursive process and a social act influenced by textual conventions (Knoch, 2011). This dual focus aims to help students develop writing fluency through multi-draft composing while also equipping them with the knowledge of specific disciplinary genres (Hyland, 2003). Instruction follows three stages : preparation, deconstruction, and joint construction (Martin & Rose, 2008).

In the preparation stage, students reflect on their past writing experiences and discuss the writing process and relevant genres. In deconstruction, instructors analyze model texts to make explicit the structure, language and rhetorical moves of target genres. Students identify textual features that achieve communicative purposes. In joint construction, students collaboratively produce sample texts with teacher guidance and constructive feedback (Hyland, 2007).

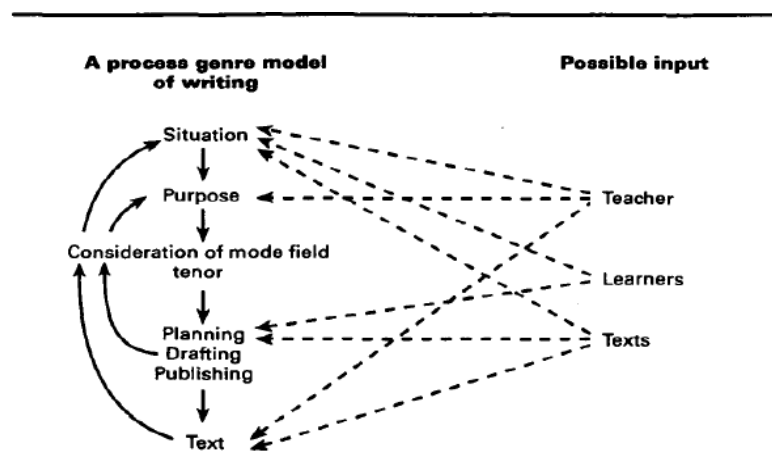
Proponents argue this approach improves students' writing process skills and ability to produce effective genre-specific texts (Coffin et al., 2003). However, critics note a lack of empirical evidence of this approach's pedagogical value compared to other methods (Casanave & Li, 2008).

In summary, the process-genre approach aims to develop student writers holistically by integrating explicit instruction of writing processes and genre conventions. More research is

needed to validate its effectiveness in facilitating students' genre competence and writing development.

Figure 4

A genre-process Model of teaching writing (Badger & White, 2000, p: 159)



The Creative Approach. The creative approach to teaching writing is a pedagogical method that encourages students to embrace their creativity and personal expression in the writing process (Fisher, 2005). Rooted in the belief that writing is not solely about following rigid rules and conventions, this approach aims to foster individuality, imagination, and originality in students' written works. The creative approach aligns closely with the idea that writing is an art form that allows for diverse styles, perspectives, and voices.

Philosophy and Principles. At the heart of the creative approach is the philosophy that writing is an opportunity for self-expression and exploration (Fisher, 2005). This approach challenges the notion that writing should conform to standardized norms, instead valuing the diversity of voices and perspectives. It emphasizes that creativity in writing should not be stifled by overemphasis on correctness but should be celebrated as a means of personal and artistic communication.

Instructional Techniques. In the creative approach, writing instruction encourages students to think outside the box and experiment with various styles, genres, and forms

(Fisher, 2005). Educators provide open-ended prompts that stimulate imagination and allow for multiple interpretations. Students are encouraged to explore different writing techniques, such as metaphor, imagery, and symbolism, to convey their ideas in unique and engaging ways. Instruction often involves workshops and peer feedback to promote collaboration and the exchange of creative ideas.

Teacher Role. Educators following the creative approach act as mentors who nurture students' individual creativity and guide them in developing their unique writing styles (Fisher, 2005). They create a supportive environment that values risk-taking and encourages students to push the boundaries of conventional writing. Teachers provide constructive feedback that fosters artistic growth and helps students refine their creative ideas while maintaining clarity and coherence.

Student Engagement. Students engaging in the creative approach are empowered to view writing as a form of artistic expression rather than a strict adherence to rules (Fisher, 2005). They are encouraged to experiment with language, structure, and tone to convey emotions and ideas effectively. This approach encourages students to tap into their personal experiences and feelings to create authentic and impactful written pieces that resonate with readers on an emotional level.

Advantages and Criticisms. The creative approach offers advantages in nurturing students' self-confidence, individuality, and emotional intelligence (Fisher, 2005). It promotes a positive attitude toward writing by focusing on the joy of creation and personal expression. Critics of this approach caution that while creativity is important, students should also be equipped with the skills to communicate effectively in formal and professional contexts.

In conclusion, the creative approach to teaching writing celebrates the uniqueness of students' voices and encourages them to express themselves authentically through their

writing. By valuing creativity and originality, educators employing this approach empower learners to view writing as a platform for self-discovery and artistic communication.

Strategies for Teaching Writing

Writing is a complex skill that requires a combination of knowledge, practice, and strategies (Graham & Perin, 2007; NCTE, 2020). Educators play a crucial role in teaching writing effectively and helping students develop their writing skills (Graham et al., 2011). This section explores various strategies for teaching writing, supported by research and best practices (Graham et al., 2013).

Pre-Writing Strategies.

Brainstorming. Brainstorming is an effective pre-writing strategy that helps students generate ideas for their writing (Graham & Hebert, 2010). It involves encouraging students to freely write or discuss ideas related to the writing topic. This strategy promotes creativity and allows students to explore different perspectives.

Graphic Organizers. Graphic organizers, such as concept maps, mind maps, or story webs, provide visual representations of ideas and help students organize their thoughts before writing (Graham et al., 2013). These tools assist students in developing a clear structure and identifying the main ideas and supporting details for their writing.

Modeling and Instruction Strategies

Shared Writing. Shared writing involves collaborative writing between the teacher and students (Graham et al., 2011). The teacher models the writing process, thinking aloud, and engaging students in discussions about word choice, sentence structure, and organization. This strategy helps students understand the mechanics of writing and develop their writing skills.

Mini-Lessons. Mini-lessons focus on specific writing skills or techniques, such as grammar, sentence variety, or using descriptive language (Graham et al., 2013). These short,

targeted lessons provide students with explicit instruction and practice opportunities to strengthen their writing abilities.

Writing Process Strategies

Planning and Outlining. Teaching students to plan and outline their writing helps them organize their ideas and create a coherent structure (Graham et al., 2011). Teachers can guide students in creating outlines or providing templates to support the planning process. This strategy enhances students' ability to develop well-structured and organized compositions.

Drafting and Revising. Encouraging students to write multiple drafts and revise their work promotes the development of writing skills (Graham & Hebert, 2010). Teachers can provide feedback through conferences or written comments, focusing on content, organization, clarity, and grammar. This iterative process allows students to refine their writing and improve its overall quality.

Authentic Writing Experiences Strategies

Writing for Real Audiences. Providing opportunities for students to write for authentic audiences beyond the classroom motivates and engages them in the writing process (NCTE, 2020). Teachers can incorporate activities such as writing letters, creating blogs, or participating in writing contests. Authentic writing experiences foster a sense of purpose and help students understand the real-life applications of writing.

Peer Collaboration and Feedback. Encouraging peer collaboration and feedback enables students to learn from one another and develop their writing skills (Graham et al., 2011). Collaborative activities such as peer editing or writing workshops promote constructive criticism, peer support, and the development of a writing community.

In conclusion, Teaching writing requires a combination of effective strategies that address different stages of the writing process. Pre-writing strategies, modeling and instruction, the writing process, and authentic writing experiences play vital roles in

enhancing students' writing skills. By implementing these strategies, educators can foster a supportive and engaging learning environment that empowers students to become proficient writers.

Assessing Writing

Assessing written language is a critical process that involves assessing the quality, effectiveness, and communicative impact of a piece of writing. Whether it is an essay, a report, an email, or any other form of written communication, evaluation helps determine whether the intended message has been successfully conveyed and whether the writing aligns with the desired goals and standards. Here is how to approach the evaluation of written language:

Understanding of Prompt or Objective

The teacher begins by assessing whether the student's writing addresses the given prompt or objective. Is the main topic or purpose clearly understood and addressed in the writing? (Goodmann, 1982)

Clarity and Coherence

The teacher looks for clarity in the student's writing. Is the message communicated in a clear and coherent manner? Are ideas organized logically, with smooth transitions between sentences and paragraphs? (Klimova, 2011).

Structure and Organization

The teacher evaluates the overall structure of the writing. Is there a clear introduction, body, and conclusion? Are ideas presented in a well-organized sequence that helps readers follow the content? (Weigle, 2002).

Thesis or Main Idea

For essays or argumentative writing, the teacher examines the thesis statement or main idea. Does it effectively convey the central point of the writing? Are the main arguments or points well-defined and supported? (Chaudron, 1983).

Supporting Evidence

The teacher assesses the quality and relevance of evidence provided to support claims or arguments. Are sources cited accurately and appropriately? Is the evidence convincing and well-integrated? (Hamp-Lyons, 1991)

Language Use and Style

The teacher analyzes the use of language and writing style. Are words used appropriately and effectively? Is the writing engaging, with the use of descriptive language, figurative expressions, and a varied vocabulary? (Polio & Friedman, 2016).

Grammar and Mechanics

The teacher checks for correct grammar, punctuation, and spelling. Are there errors that might impede comprehension? Is the writing polished and free of distracting mistakes? (Polio & Friedman, 2016).

Audience and Tone

The teacher considers the intended audience and the tone of the writing. Does the writing use an appropriate tone for the readers? Is the level of formality consistent with the context?

Engagement and Impact

The teacher evaluates whether the writing captures the reader's interest and maintains engagement. Does it evoke emotions, critical thinking, or curiosity?

Originality and Creativity

In creative writing, the teacher assesses the originality of ideas and the creativity of expression. Does writing showcase unique perspectives and creative approaches?

Development and Depth.

The teacher looks for depth in the writing. Are ideas developed with sufficient detail, examples, and explanations? Is the analysis thorough and thoughtful?

Revision and Improvement

The teacher provides constructive feedback to guide the student's revision process. Feedback may highlight strengths and suggest areas for improvement, encouraging the student to refine their writing.

Growth Over Time.

In longer-term writing assignments, the teacher considers the student's growth as a writer. Have they demonstrated improvement in areas such as organization, vocabulary use, and content development?

Meeting Learning Objectives

Ultimately, the teacher evaluates whether the writing meets the learning objectives of the assignment or curriculum. Does the student's writing demonstrate the skills and concepts taught in the course?

By carefully evaluating these aspects, teachers provide valuable feedback that helps students develop their writing skills, improve their communication abilities, and become more effective and confident writers.

Writing Evaluations and Writing Rubric

Teachers' evaluations of students' written work are often guided by writing rubrics. A writing rubric is a predefined set of criteria used to assess and evaluate various aspects of a student's writing, providing a clear and consistent framework for grading. Here is how teachers' evaluations and writing rubrics are interconnected.

Writing Rubric

A writing rubric is a tool that outlines specific criteria, expectations, and levels of achievement for different components of writing, such as content, organization, language, mechanics, and more. Each criterion is associated with a range of possible scores that reflect different levels of performance. Rubrics help teachers maintain objectivity in their evaluations and provide students with detailed feedback on their strengths and areas for improvement.

Writing Evaluation

When evaluating students' written work, teachers use the rubric to assess how well students meet each criterion. The teacher reads the writing and assigns a score to each criterion based on the level of proficiency demonstrated by the student. These scores are then totaled to provide an overall grade for the writing assignment. Teachers' writing evaluations are based on the rubric's guidelines, ensuring that assessment is consistent and fair across all students' submissions (Allen & Tanner, 2006).

Interpreting the Rubric

Teachers interpret the rubric by examining the quality of each aspect of the writing and comparing it to the criteria and descriptions provided in the rubric. For example, if a rubric includes criteria for organization, teachers will assess how well the writing is structured, if it has a clear introduction and conclusion, and how effectively ideas are transitioned between paragraphs.

Providing Feedback. Writing rubrics not only help teachers assign grades but also enable them to provide specific feedback to students. Teachers can highlight areas where a student excelled and offer suggestions for improvement in areas that need development. This feedback is constructive and actionable, helping students understand their strengths and weaknesses and encouraging their growth as writers (Saddler & Andrade, 2004).

Transparency and Consistency. Rubrics ensure transparency and consistency in the evaluation process. Since the criteria and expectations are clearly defined, both students and teachers have a shared understanding of what is being assessed and how it is being assessed. This transparency reduces subjectivity and ensures that all students are evaluated using the same standards (Ragupathi & Lee, 2020).

Encouraging Growth. Rubrics not only measure performance but also guide improvement. By breaking down writing into specific components, rubrics show students the areas they need to focus on to enhance their skills. This empowers students to take ownership of their learning and work towards becoming more proficient writers (Dobbs & Leider, 2021).

In essence, teachers' evaluations of students' written work are informed by writing rubrics. Rubrics provide a structured framework for assessment, offering both teachers and students a clear understanding of expectations and criteria, fostering consistency, and promoting growth in writing skills.

Writing Evaluation Rubric

A writing evaluation rubric is a structured tool that educators use to assess and provide feedback on students' written work. It outlines specific criteria and expectations for different aspects of the writing, allowing for consistent and objective evaluation. Here's an example of a simple writing evaluation rubric for assessing an essay.

Table 1

Writing Evaluation Rubric (Vaezi & Rezaei (2019))

Criteria	Excellent (4)	Proficient (3)	Adequate (2)	Limited (1)
Content and Ideas	Clear, insightful ideas that demonstrate a deep understanding of the topic. Effective use of evidence and examples to support points.	Solid ideas that demonstrate a good grasp of the topic. Adequate use of evidence and examples to support points.	Adequate ideas, though some may lack clarity or depth. Limited use of evidence or examples.	Ideas are unclear or undeveloped. Little to no evidence or examples provided.

Organization	Well-structured with a clear introduction, logical progression of ideas, and a strong conclusion. Effective use of transitions.	Generally well-organized with a clear introduction, progression of ideas, and a conclusion. Transitions are present.	Some organization with an introduction, body, and conclusion. Transitions may be weak.	Lack of clear organization, with disjointed ideas and poor transitions.
Language and Style	Engaging and appropriate language. Varied sentence structure. Consistent tone and voice.	Clear and appropriate language. Adequate sentence structure. Generally consistent tone and voice.	Language is adequate but may lack flair. Basic sentence structure. Some inconsistency in tone and voice.	Language use is limited or inappropriate. Poor sentence structure. Inconsistent tone and voice.
Mechanics and Grammar	Virtually error-free in grammar, punctuation, and spelling.	Few minor errors in grammar, punctuation, and spelling that do not hinder comprehension.	Some errors in grammar, punctuation, and spelling, but they do not significantly impede understanding.	Numerous errors in grammar, punctuation, and spelling that hinder comprehension.
Overall Impression	Exceptional work that exceeds expectations. Demonstrates a strong command of writing skills.	Competent work that meets expectations. Displays solid writing skills.	Adequate work that meets basic requirements. Some areas may need improvement.	Substandard work that falls short of requirements. Requires significant improvement.

Teachers use this rubric to assess each criterion for a given writing assignment and assign scores accordingly. The scores for each criterion are then totaled to determine the overall grade for the written work. The rubric not only helps teachers evaluate student performance but also provides students with clear feedback on their strengths and areas for improvement, fostering a better understanding of the quality of their writing and how to enhance their skills.

Factors Contributing to EFL Learners' Constraints in Writing

English as a Foreign Language (EFL) learners often face challenges when it comes to writing in English. These challenges can be attributed to various factors that impact their writing skills.

Language Proficiency

One of the primary factors influencing EFL learners' writing constraints is their level of language proficiency. Limited vocabulary, grammatical errors, and difficulties in sentence structure can hinder their ability to express themselves effectively in writing (Silva, 1993). Insufficient language proficiency can lead to inaccurate and unclear writing, affecting the overall quality of their compositions.

Cultural and Sociolinguistic Factors

Cultural and sociolinguistic factors can also play a significant role in constraining EFL learners' writing abilities. Learners from different cultural backgrounds may struggle with understanding and incorporating cultural nuances, idiomatic expressions, and rhetorical patterns that are common in English writing conventions (Kubota, 2013). These differences can impact the coherence and cohesion of their written work.

Lack of Writing Strategies

EFL learners may face constraints in writing due to a lack of effective writing strategies. They may not be familiar with pre-writing techniques, such as brainstorming or outlining, which can help organize their thoughts and structure their compositions (Silva, 1993). Additionally, inadequate knowledge of revision and editing strategies may result in limited ability to self-correct errors and improve the clarity of their writing.

Limited Exposure to Authentic Writing

Limited exposure to authentic English writing materials can hinder EFL learners' writing development. Lack of access to diverse reading materials, including academic texts,

literature, and authentic writing samples, can restrict their exposure to different writing styles, genres, and discourse patterns (Hyland, 2003). Insufficient exposure to authentic writing may limit their ability to develop a strong foundation in English writing conventions.

Lack of Motivation and Confidence

Motivation and confidence play crucial roles in EFL learners' writing performance. Learners who lack intrinsic motivation and self-confidence may feel reluctant to engage in writing tasks or take risks in their writing (Dörnyei, 2001). This lack of motivation and confidence can lead to limited practice opportunities and hinder the development of their writing skills.

To sum up, several factors contribute to the constraints faced by EFL learners in writing. These include language proficiency, cultural and sociolinguistic factors, lack of writing strategies, limited exposure to authentic writing, and lack of motivation and confidence. Understanding these factors is crucial for educators and curriculum designers to develop targeted interventions and support systems that address these constraints effectively. By addressing these factors, EFL learners can overcome their writing challenges and develop stronger writing skills.

Section 2: Autonomy in Writing

Language teaching nowadays is seen not as the ability to teach but as the ability to make learners learn. For this reason, learner centered education puts the learner at the center of classroom organization. There is a change in the view of language learning from a set of rules to be transmitted to learners from teachers to a process in which the learner takes more responsibility in learning. By doing this, the learner becomes autonomous in language learning.

Definition and Significance of Autonomy in Language Learning

There is no consensus on the concept of autonomy. It is a multifaceted concept whose meaning has been discussed from many perspectives. In the field of education some consider it as taking charge of one's learning. Others see it as a decision making, and others think autonomy is a cognitive and self-management process.

According to Benson (2011), autonomy in language learning refers to learners' ability to take control of their own learning process, make decisions, and take responsibility for their language learning goals and progress. It involves learners actively engaging in the learning process, setting their own learning objectives, selecting materials and resources, and evaluating their own learning outcomes (Little, 1991).

Autonomy in language learning is defined as "the capacity to take charge of one's own learning" (Benson, 2011, p. 15). It emphasizes learners' self-directedness and their ability to regulate their learning independently. Autonomy is important in language learning because it enables learners to become more self-reliant, motivated, and engaged in their learning process (Benson, 2011; Oxford & Shearin, 1994).

When learners have a sense of autonomy, they become active participants in their own learning, making decisions about what, when, and how they learn. This allows them to tailor

their learning activities to their individual needs and interests, leading to more meaningful and effective language learning experiences (Benson, 2011; Oxford & Shearin, 1994).

Autonomy in language learning holds immense importance as a pedagogical approach that empowers learners to become active, self-directed participants in their educational journey. This approach, defined as learners' ability to take control of their learning process, make informed decisions, and take responsibility for their language learning goals and progress (Benson, 2011), brings forth several compelling benefits that contribute to learners' holistic development and lifelong learning skills.

The significance of autonomy in language learning is evident in its positive impact on learners' language proficiency, confidence, and motivation (Benson, 2011; Little, 1991). Autonomy encourages learners to take risks, experiment with the language, and develop their own strategies for language acquisition and use (Benson, 2011). It fosters a sense of ownership and personal investment in the learning process, which can lead to increased motivation and perseverance in the face of challenges (Oxford & Shearin, 1994).

At its core, autonomy in language learning fosters a sense of ownership and agency in learners (Benson, 2011). By actively participating in the decision-making process, learners develop a deeper engagement with their learning material, leading to increased motivation and dedication to their studies (Little, 1991). This motivation is intrinsic, rooted in the individual's personal interest and investment in their learning journey (Deci & Ryan, 2000). Learners are not just recipients of knowledge but co-creators of their own educational experience.

One of the most profound impacts of autonomy is its ability to promote critical thinking and metacognitive skills (Benson, 2011). When learners take responsibility for setting their learning objectives, selecting resources, and evaluating their progress, they engage in reflective practice that enhances their ability to think analytically about their learning strategies (Little, 1991). This metacognition encourages learners to assess the effectiveness of

their approaches, make adjustments as needed, and develop a deeper understanding of their learning process (Vygotsky, 1978).

Moreover, autonomy in language learning is not only valuable for learners' immediate language development but also for their lifelong learning skills. By developing autonomy, learners acquire strategies for independent learning that can be transferred to other areas of their lives, enabling them to become lifelong learners (Benson, 2011; Little, 1991).

Autonomy in language learning also nurtures lifelong learning skills. The ability to take control of one's learning journey extends beyond the classroom, enabling learners to independently explore new topics, adapt to evolving contexts, and continue their learning beyond formal education (Little, 1991). This is particularly relevant in today's rapidly changing world, where individuals need to be adaptable and proactive in acquiring new skills throughout their lives.

Furthermore, autonomy cultivates a positive learning environment that respects learners' diverse backgrounds and learning preferences (Benson, 2011). Learners can tailor their learning activities to align with their individual needs, interests, and learning styles. This personalized approach acknowledges the unique strengths and challenges of each learner and creates a more inclusive and effective learning environment.

Autonomy in language learning also has a positive impact on learners' linguistic proficiency. Learners who actively engage in their learning process tend to take more risks, experiment with language use, and seek out opportunities for authentic language practice (Little, 1991). This experimentation enables learners to expand their language skills, develop fluency, and acquire a deeper understanding of language nuances (Deci & Ryan, 2000).

Educators also benefit from promoting learner autonomy. When learners take responsibility for their learning, educators can transition from being sole sources of knowledge to facilitators and guides (Little, 1991). This collaborative relationship encourages

open communication, mutual respect, and a shared commitment to learning outcomes. Educators can offer guidance, feedback, and support while learners actively drive their own learning experience.

Summarizing what has been said, autonomy in language learning refers to learners' ability to take control of their own learning process, make decisions, and take responsibility for their language learning goals and progress. It is significant because it promotes self-directedness, motivation, and engagement in the learning process, leading to more meaningful and effective language learning experiences. Autonomy also has long-term benefits, as it equips learners with lifelong learning skills. Autonomy in language learning is a transformative approach that empowers learners to become proactive, engaged, and reflective participants in their educational journey. It fosters intrinsic motivation, critical thinking, metacognitive skills, and lifelong learning habits. Moreover, autonomy enhances linguistic proficiency, encourages personalization, and nurtures a collaborative educator-learner dynamic. By promoting autonomy, educators and learners alike contribute to the creation of a dynamic and learner-centered educational ecosystem that prepares individuals for the challenges of the modern world.

How Autonomy Shapes Language Learning?

The concept of autonomy holds a significant place in the realm of language learning, shaping the way learners engage with their linguistic journeys. It's more than just a classroom principle; it permeates into learners' broader life experiences, empowering them to take charge of their learning trajectory (Benson, 2012). This holistic perspective emphasizes autonomy as a catalyst for agency and empowerment, a force that allows learners to actively mold their linguistic and personal growth.

Szöcs (2017) delves into the intricate interplay of beliefs held by both teachers and learners regarding autonomy in language learning. Teachers' perceptions of autonomy

influence the ways they design and implement instructional strategies. In turn, these strategies affect learners' opportunities to exercise autonomy within the classroom environment. His study also reveals the reciprocal relationship between learners' beliefs about their own autonomy and their engagement, motivation, and adoption of effective learning strategies.

In the digital age, technology has given autonomy a new dimension in language learning. Lai (2019) explores how technology transcends traditional classroom boundaries, enabling learners to engage with language autonomously beyond formal instruction. With technology, learners can access authentic language resources, engage in self-assessment, and practice language independently. This integration of technology fosters self-directed learning, expanding learners' horizons and promoting a sense of control over their linguistic development.

Considering the dynamic landscape of multilingualism, Benson and Lamb (2020) assert that autonomy's role becomes even more pivotal. In this era of interconnectedness, learners encounter diverse linguistic contexts and choices. Autonomy empowers learners to make informed decisions about which languages to learn, how to use them, and how to incorporate them into their identities. It becomes a compass guiding learner through the complexities of multilingual communication.

In essence, autonomy shapes language learning by instilling agency and cultivating engagement. It is not confined to the classroom; it empowers learners to navigate a multilingual world with confidence. From fostering independent learning strategies to embracing technology's tools, autonomy equips learners to embrace language learning as a personal journey of growth and exploration.

Theoretical Framework of Learner Autonomy in Language Learning

The concept of learner autonomy in language learning is rooted in various theoretical frameworks that elucidate the interplay between learners' agency, cognitive processes, and

social contexts. This section delves into some prominent theoretical perspectives that provide a framework for understanding the complex dynamics of learner autonomy.

Social constructivist theories

Social constructivist theories, such as those proposed by Vygotsky(1978), emphasize the role of social interaction in shaping learners' cognitive development and autonomy. According to Vygotsky's Zone of Proximal Development (ZPD), learners advance in their learning trajectory through collaboration with more knowledgeable others, whether peers or educators. This theory highlights the importance of scaffolding—support provided by others—to facilitate learners' transition from external guidance to independent learning (Benson, 2011). Within this framework, learner autonomy is seen as a gradual process, with learners initially reliant on external assistance and gradually assuming control over their learning experiences.

Self-Determination Theory

Self-Determination Theory (SDT) underscores the significance of intrinsic motivation and autonomy-supportive environments in fostering learners' self-regulation and autonomy (Deci & Ryan, 2000). According to SDT, learners have innate psychological needs for autonomy, competence, and relatedness. Autonomy is considered a basic psychological need, and environments that support learners' autonomy enhance their engagement and willingness to take ownership of their learning journey (Deci & Ryan, 2000). Within this framework, learner autonomy is closely tied to learners' perceptions of their autonomy-supportive environment and their intrinsic motivation to learn.

Social Cognitive Theory

Social Cognitive Theory, proposed by Bandura (1997), emphasizes the role of self-efficacy—the belief in one's capability to perform a specific task—in influencing learners' behavior and autonomy. Self-efficacy beliefs impact learners' decisions to engage in self-

directed learning and their ability to overcome challenges (Bandura, 1997). Within this framework, enhancing learners' self-efficacy can lead to greater agency in managing their learning experiences and taking initiative in language learning tasks.

Ecological Systems Theory

Ecological Systems Theory, introduced by Bronfenbrenner (1979), recognizes that learners' autonomy is shaped by interactions between various systems, including the microsystem (immediate environment), meso-system (interconnections among micro-systems), exosystem (external influences), and macro-system (cultural context). This theory highlights the dynamic nature of learner autonomy, acknowledging that it is influenced by the interplay of multiple factors in different contexts (Benson, 2011). Within this framework, learner autonomy is seen as a result of the dynamic interaction between the individual learner and the surrounding social and cultural systems.

In short, the theoretical frameworks of social constructivism, self-determination theory, social cognitive theory, and ecological systems theory offer valuable insights into the multifaceted nature of learner autonomy in language learning. These theories highlight the roles of social interaction, intrinsic motivation, self-efficacy, and ecological contexts in shaping learners' agency and self-directedness. By understanding these theoretical underpinnings, educators can design instructional strategies that empower learners to progressively assume control of their language learning experiences.

Autonomy Approach in Language Learning

The Autonomy Approach in language learning is a pedagogical perspective that emphasizes learners' active involvement, self-direction, and control over their learning process (Boud, 2012). It involves learners taking responsibility for their learning objectives, decisions, and progress, resulting in a more personalized and meaningful learning experience.

This approach is underpinned by various theories and concepts that advocate for learner agency and empowerment (Voller, 2014).

One foundational concept is "adjustable autonomy," which refers to the flexible balance between learners' independence and external support (Mostafa et al., 2019). This perspective acknowledges that learners may require varying degrees of guidance and structure at different stages of their learning journey. Adjustable autonomy encourages educators to provide learners with the freedom to make choices while also offering necessary guidance and resources to facilitate learning (Mostafa et al., 2019).

Within the autonomy approach, the role of the teacher is reconceptualized. Instead of being the sole source of knowledge and direction, the teacher becomes a facilitator, guiding learners in setting goals, planning strategies, and reflecting on their progress (Voller, 2014). This shift aligns with the broader educational shift toward a learner-centered approach, where learners actively construct their knowledge and skills through exploration and critical thinking.

Autonomy Approach in Writing

Autonomy approach leads to other important approaches, Learner-centered approaches, that represent a pivotal shift in educational paradigms, focusing on the individual learner's needs, preferences, and autonomy within the learning process (Johnson, 2015). In the context of English as a Foreign Language (EFL) writing, these approaches recognize learners as active participants who actively shape their writing development. The following lines mention how learner-centered approaches can empower learners to take ownership of their EFL writing journey and enhance their autonomy.

Personalized Learning Path

Learner-centered approaches in EFL writing entail tailoring learning experiences to individual needs and goals (Benson, 2011). This involves allowing learners to choose writing

topics that resonate with them, aligning with their interests and motivations. For instance, Johnson (2015) argues that when learners have a say in the topics they write about, they are more likely to be engaged and committed to the writing process. This choice-driven approach promotes autonomy by enabling learners to explore subjects that matter to them.

Flexible Writing Tasks

Implementing learner-centered strategies involves offering a range of writing tasks that cater to various learning styles and preferences (Vygotsky, 1978). By providing options such as creative writing, analytical essays, or reflective journals, educators accommodate diverse writing interests and skills. This flexibility aligns with the principles of autonomy, as learners can choose tasks that resonate with their strengths and aspirations (Benson, 2011).

Guided Self-Assessment

Learner-centered approaches encourage learners to actively assess their own writing (Boud, 2012). Through self-assessment tools or checklists, learners can evaluate their work against specific criteria. This practice promotes metacognition—the awareness of one's thinking processes—enabling learners to identify their strengths and areas for improvement (Voller, 2014). Educators' role here is to guide learners in developing effective self-assessment skills, fostering a sense of autonomy and responsibility for their writing quality.

Feedback as Dialogue

In a learner-centered EFL writing environment, feedback is viewed as a dialogue rather than a one-sided evaluation (Benson & Lamb, 2020). Teachers engage in meaningful conversations with learners about their writing, encouraging them to reflect on their choices and revise accordingly (Lyster & Saito, 2010). This interactive feedback approach aligns with autonomy principles, as learners actively engage with feedback, make informed decisions, and take ownership of their writing revisions.

Creating a Supportive Environment.

A learner-centered classroom culture prioritizes open communication and collaboration (Szócs, 2017). Educators foster an environment where learners feel comfortable sharing their ideas, seeking guidance, and collaborating with peers (Benson & Lamb, 2020). This communal approach to learning not only promotes autonomy by acknowledging learners' agency in the learning process but also encourages them to take charge of their writing development.

In conclusion, learner-centered approaches in EFL writing education shift the focus from traditional instruction to the learner as an active agent in their learning journey. By allowing personalized learning paths, offering flexible writing tasks, guiding self-assessment, facilitating feedback dialogues, and creating a supportive environment, educators empower learners to exercise autonomy and become self-directed writers. These strategies recognize that fostering autonomy in EFL writing involves acknowledging learners' agency, preferences, and diverse learning styles.

Autonomy and Language Writing Development

Autonomy plays a crucial role in language writing development. When learners have autonomy in language writing, they are able *to choose topics* that interest them, select appropriate writing tasks, and set their own writing goals (Murray, 2013). This sense of choice and control motivates learners and enhances their engagement with the writing process, leading to increased effort and commitment (Murray, 2013). Learner autonomy empowers individuals to choose topics that resonate with their interests, experiences, and goals. When learners have the freedom to select topics that genuinely engage them, their intrinsic motivation to write increases (Deci & Ryan, 2000). This personal investment fuels a

deeper connection to the writing task and often results in more authentic and heartfelt compositions.

Moreover, autonomy allows learners to decide on the *writing strategies and techniques* they want to employ. They can experiment with different writing styles, structures, and vocabulary choices, tailoring their writing to suit their individual needs and preferences (Benson, 2011). This experimentation fosters creativity and personal expression in writing, leading to more authentic and meaningful written texts (Murray, 2013). When learners have the autonomy to experiment with writing styles, structures, and vocabulary choices, they tap into their creative potential. Autonomy provides a platform for learners to express themselves authentically, transcending the confines of formulaic writing. This creative latitude results in texts that bear the imprint of individuality and personal expression (Benson, 2011; Murray, 2013).

Autonomy also enables learners to take responsibility for their own learning progress by engaging in *self-assessment* and reflection on their writing. Learners can evaluate their own writing strengths and weaknesses, identify areas for improvement, and develop strategies to address them (Benson, 2011). This reflective practice promotes metacognitive awareness and helps learners become more effective and independent writers (Murray, 2013).

Furthermore, autonomy in language writing encourages learners to seek *feedback and support* from peers, teachers, or resources available to them. Learners can actively seek guidance, advice, and constructive criticism to enhance their writing skills (Benson, 2011). This collaborative approach to writing fosters a sense of community and promotes social interaction, which can lead to improved writing proficiency (Murray, 2013).

Autonomy in EFL writing has a positive influence on *learners' motivation* and engagement. Autonomously selecting topics and setting goals aligns with learners' internal desires, fostering a sense of ownership over the writing process. This ownership, in turn,

promotes a heightened sense of responsibility, determination, and willingness to invest time and effort into crafting well-thought-out pieces (Benson, 2011; Deci & Ryan, 2000).

Also, autonomy extends to learners' revision strategies and reflective practices. Autonomous writers engage in *metacognitive processes*, evaluating their writing critically, identifying areas for improvement, and implementing changes. This *self-regulatory approach* fosters a deeper understanding of the writing process and contributes to the development of effective revision skills (Murray, 2013).

In conclusion, autonomy plays a significant role in language writing development. It allows learners to choose topics, set goals, experiment with writing strategies, and take responsibility for their own learning progress. Autonomy in language writing promotes motivation, engagement, creativity, and metacognitive awareness, leading to enhanced writing skills and meaningful written texts.

Impact of Autonomy on Writing Quality

Autonomy in the context of English as a Foreign Language (EFL) writing significantly influences the quality of written outputs. This autonomy allows learners to take ownership of their writing process, make self-initiated choices, and engage with the writing task more deeply. Here, we delve into how autonomy impacts the quality of written compositions, focusing on how learners' active involvement and personal investment contribute to improved writing skills and the creation of more authentic and meaningful texts.

Personal Relevance and Motivation.

Autonomy enables learners to select topics and themes that resonate with their interests and experiences (Wang & Jiang, 2021). This intrinsic motivation to write about subjects that matter to them heightens their engagement with the writing process. Learners' genuine enthusiasm for the content naturally translates into more thoughtful, invested, and enthusiastic writing.

Ownership and Responsibility

Learner autonomy grants individuals a sense of ownership over their writing tasks (Tanyeli Zeki & Kuter, 2018). This ownership breeds a heightened sense of responsibility, encouraging learners to dedicate time and effort to producing high-quality work. As learners take control of their writing process, they embrace the task as their own, leading to a greater commitment to producing polished and well-crafted texts.

Individual Expression and Authenticity

Autonomy empowers learners to experiment with various writing styles, tones, and structures (Wang & Jiang, 2021). This creative latitude fosters a sense of authenticity in their compositions. Learners can express themselves in ways that feel most natural to them, resulting in texts that reflect their unique voices and perspectives. This authenticity adds depth and richness to their writing.

Critical Thinking and Metacognition

Autonomous writers engage in reflective practices, evaluating their work critically (Tanyeli Zeki & Kuter, 2018). This metacognitive awareness allows learners to identify strengths and weaknesses in their writing. As a result, learners can implement strategic revisions and improvements, ultimately leading to enhanced writing quality. The ability to critically assess one's writing is a hallmark of autonomous writers.

Meaningful Engagement and Effort

Autonomy fosters a more meaningful engagement with the writing process (Wang & Jiang, 2021). Learners invest effort not merely to meet assignments but to convey their ideas effectively. This depth of engagement drives learners to delve into research, refine their arguments, and structure their compositions meticulously, thereby elevating the overall quality of their written outputs.

Development of Lifelong Skills

The autonomy nurtured through the EFL writing process equips learners with skills that extend beyond the classroom (Tanyeli Zeki & Kuter, 2018). These skills include critical thinking, effective communication, and the ability to adapt writing to different contexts. Learners are empowered to apply these skills to various aspects of their academic and professional lives.

In conclusion, autonomy in EFL writing significantly impacts the quality of written outputs. Learners' self-initiated choices, engagement with the writing process, and critical reflection contribute to improved writing skills and the creation of more authentic and meaningful compositions. By allowing learners to take ownership of their writing journey, educators cultivate a culture of active participation and invest learners in producing writing of greater substance and significance.

Factors Influencing Learner Autonomy in Writing

Learner autonomy, a pivotal concept in modern education, is influenced by a multitude of factors that shape the extent to which learners can take control of their own learning experiences, particularly in the context of writing. Several key factors interact to either foster or hinder learner autonomy, ultimately impacting the effectiveness of writing instruction. This section explores some of these influential factors, drawing insights from various scholarly perspectives.

Pedagogical Approaches

Pedagogical approaches play a crucial role in shaping learner autonomy in writing. Constructivist pedagogies, such as inquiry-based learning or process-oriented writing instruction, emphasize learner-centeredness and engagement. According to Vygotsky's social constructivist theory, learners' interactions with peers and educators significantly influence their ability to regulate their learning process (Vygotsky, 1978). These pedagogical

approaches, rooted in social interaction, provide learners with opportunities to collaborate, receive feedback, and engage in self-reflection—essential components of nurturing autonomy (Benson, 2011).

In the realm of English as a Foreign Language (EFL) writing instruction, the adoption of effective pedagogical approaches plays a pivotal role in nurturing learner autonomy. By implementing various strategies, educators can create environments that empower learners to take ownership of their writing process and become more self-directed learners. Three prominent pedagogical approaches that support the development of autonomy in EFL writing include inquiry-based learning, process-oriented writing instruction, and technology-enhanced strategies.

Inquiry-Based Learning

Inquiry-based learning is a pedagogical approach that places learners at the center of their learning journey. Ernst, Hodge, and Yoshinobu (2017) define inquiry-based learning as an approach that encourages learners to ask questions, explore topics, and seek answers through investigation. In the context of EFL writing, educators can design writing tasks that require learners to delve into research, critically analyze information, and construct well-supported arguments. By engaging in this process, learners not only enhance their writing skills but also develop a sense of autonomy as they navigate through the inquiry process. This approach fosters curiosity, critical thinking, and the ability to make informed decisions about their writing topics and approaches.

Process-Oriented Writing Instruction

Process-oriented writing instruction shifts the focus from solely evaluating final written products to guiding learners through the various stages of the writing process. Mcquitty (2014) highlights that this approach emphasizes pre-writing activities, drafting, revising, editing, and reflecting on the writing journey. By breaking down the writing process into

manageable steps, learners gain a deeper understanding of their own writing strategies and preferences. This self-awareness empowers them to make informed decisions about their writing choices, fostering a sense of autonomy in crafting their compositions. Through continuous reflection and improvement, learners develop the skills needed to independently revise and refine their work.

Technology-Enhanced Strategies

In the digital age, technology offers innovative ways to enhance autonomy in EFL writing. Kali and Linn (2007) mention that integrating technology tools such as online writing platforms, collaborative document editing, and grammar-checking software can provide learners with immediate access to resources for self-correction and improvement. Additionally, technology enables learners to engage in virtual peer review and receive feedback from peers beyond the confines of the classroom. Such technology-enhanced strategies not only offer learners flexibility in managing their writing process but also encourage them to take initiative in seeking resources that enhance their writing skills. However, educators must strike a balance, ensuring that learners view technology as a support rather than a replacement for critical thinking and self-directed learning.

In conclusion, pedagogical approaches that foster autonomy in EFL writing are instrumental in shaping learners into independent and self-directed writers. By incorporating inquiry-based learning, process-oriented writing instruction, and technology-enhanced strategies, educators create dynamic learning environments that encourage learners to explore, reflect, and make informed decisions about their writing. These approaches empower learners to become active participants in their writing process, cultivating the essential skills needed to thrive as autonomous writers beyond the classroom.

Technology Integration

The advent of technology has introduced new dimensions to learner autonomy. Digital tools, such as online writing platforms and grammar-checking software, offer learners immediate access to resources for self-correction (Godwin-Jones, 2003). However, the reliance on technology for feedback can potentially hinder the development of critical self-assessment skills. Learners must learn to interpret technology-driven suggestions critically, thus striking a balance between using automated tools as aids and cultivating their own evaluative judgment (Chen & Cheng, 2019).

Cultural Factors

Cultural contexts significantly influence how learners perceive autonomy. In collectivist cultures, where group harmony is emphasized, learners might exhibit less assertiveness in taking control of their learning (Liu & Littlewood, 1997). On the other hand, individualist cultures tend to encourage independence and self-direction. Educators must navigate these cultural nuances and create environments that respect learners' diverse cultural backgrounds while fostering autonomy (Benson, 2011).

In many educational contexts, such as Vietnam, learners' perceptions of autonomy in EFL writing are embedded within sociocultural frameworks. Dang (2010) emphasizes the importance of understanding learner autonomy from a sociocultural perspective. In Vietnam, for instance, where collectivism is highly valued, learners may view autonomy in a slightly different light. Cultural norms that prioritize group harmony and respect for authority might influence learners to perceive autonomy as a collaborative process, involving guidance from teachers and collaboration with peers (Dang, 2010). In such contexts, educators need to navigate the balance between fostering individual autonomy and acknowledging the significance of collaborative learning.

Saudi Arabia provides another insightful example. Alrabai (2016) highlights the factors underlying low achievement among Saudi EFL learners, shedding light on cultural factors that affect autonomy. In cultures where deference to authority figures is prominent, learners might be hesitant to take the initiative in their learning process, particularly when it comes to expressing personal opinions or adopting self-directed approaches (Alrabai, 2016). Educators working with Saudi EFL learners should consider implementing strategies that gradually build learners' confidence in expressing their own thoughts, opinions, and preferences, thus fostering a sense of autonomy.

Adapting pedagogical approaches to accommodate cultural attitudes towards autonomy is crucial. In collectivist cultures, educators can incorporate group activities that promote collaborative learning and shared decision-making. Providing opportunities for peer collaboration and guided discussions can help learners from such backgrounds develop a sense of autonomy within a communal framework (Dang, 2010). Conversely, in individualist cultures, educators can emphasize self-directed learning, encouraging learners to make choices and set goals independently.

Furthermore, educators need to create environments that validate learners' cultural backgrounds while nurturing autonomy. Being sensitive to learners' cultural perspectives fosters a sense of belonging, making learners more receptive to embracing autonomy in their EFL writing journey. It is essential to recognize that the perception of autonomy is not universally consistent and that the concept may manifest differently across diverse cultural contexts.

In conclusion, cultural considerations have a profound impact on how learners perceive autonomy in EFL writing. Educators must acknowledge the variations in cultural attitudes towards autonomy and adapt their instructional strategies accordingly. By embracing and incorporating learners' cultural perspectives, educators can create inclusive and effective

learning environments that empower learners to develop autonomy in their EFL writing endeavors.

Motivation, Engagement and Self-Efficacy

Motivation, engagement and self-efficacy—individual beliefs in one's ability to succeed—are intrinsic factors that impact learner autonomy. Learners with higher levels of motivation tend to take a more active role in their learning, seeking out resources and opportunities for improvement (Deci & Ryan, 2000). Similarly, learners who believe in their own capabilities are more likely to approach writing tasks with a sense of agency, taking ownership of their learning trajectory (Bandura, 1997).

The role of autonomy in English as a Foreign Language (EFL) writing instruction extends beyond the development of writing skills; it significantly influences learners' motivation and engagement. Autonomy grants learners the freedom to choose their writing topics, set goals, and experiment with various writing styles, thereby fostering a sense of ownership and investment in their writing tasks. This empowerment has a profound impact on learners' motivation and engagement levels.

According to Deci and Ryan's Self-Determination Theory (2000), autonomy is a fundamental psychological need that contributes to individuals' intrinsic motivation. When learners have the autonomy to make choices about their writing topics and goals, they are more likely to perceive the writing task as personally meaningful and aligned with their interests. This alignment between the task and learners' intrinsic values enhances their intrinsic motivation, prompting them to engage in the writing process with enthusiasm and a sense of purpose (Benson, 2012).

Furthermore, autonomy in EFL writing encourages learners to take risks and experiment with different writing styles and techniques. This experimentation provides learners with a sense of agency over their writing, fostering creativity and self-expression. When learners feel

that their unique voice is valued and encouraged, they become more motivated to invest time and effort in their writing tasks (Benson & Lamb, 2020). This positive emotional experience associated with autonomy generates a cycle of increased motivation and engagement.

Empirical research supports the link between autonomy, motivation, and engagement in EFL writing. Szócs's mixed-method study (2017) involving both teachers and learners revealed that when learners are given autonomy in selecting writing topics and designing assignments, their engagement and enthusiasm for the task significantly increase. Lai (2019) similarly found that learners who engaged in autonomous learning with technology reported higher levels of motivation and engagement beyond the classroom setting.

The concept of autonomy aligns with Vygotsky's Zone of Proximal Development (ZPD) (1978), where learners are guided toward tasks that are challenging yet attainable with support. Autonomy provides learners with the agency to select tasks that match their current skills and interests, allowing them to experience a sense of accomplishment as they navigate through the writing process. This positive feedback loop of achievement further enhances their motivation and engagement (Benson, 2012).

Educator Support

Educators play a pivotal role in shaping learner autonomy. The level of guidance and scaffolding provided by educators can either empower or inhibit autonomy. Educators who encourage self-directed learning, provide opportunities for choice, and offer constructive feedback foster an environment where learners feel comfortable making decisions about their learning path (Benson, 2011).

In conclusion, learner autonomy in writing is influenced by a complex interplay of factors, ranging from pedagogical approaches and technology integration to cultural contexts, motivation, and educator support. Understanding these factors and their implications is essential for educators seeking to cultivate learner autonomy effectively. By acknowledging

the diverse influences that impact autonomy, educators can tailor their instructional strategies to empower learners to take ownership of their writing journey and develop lifelong learning skills.

The Evolving Role of Teachers in Fostering Autonomy in EFL Writing

In the context of EFL writing, the role of teachers has evolved significantly from traditional instruction to one that embraces the fostering of learner autonomy. As facilitators, guides, and mentors, teachers play a pivotal role in creating an environment that encourages learners to take ownership of their writing journey, make independent decisions, and engage with the writing process in a self-directed manner (Truong & Nguyen, 2023). This transformation in the teacher's role is marked by their active involvement in guiding, supporting, and empowering learners to develop into autonomous writers.

Facilitators of Learning

Modern EFL teachers shift from being mere transmitters of information to becoming facilitators of learning (Benson & Lamb, 2020). Instead of dictating writing topics or methods, teachers encourage learners to explore and identify their interests, fostering a sense of ownership over their writing tasks. This facilitation empowers learners to navigate the writing process with a greater degree of agency.

Guiding Self-Directed Learning.

Teachers guide learners toward becoming self-directed writers by providing a framework within which autonomy can thrive (Truong & Nguyen, 2023). They introduce learners to various writing strategies, techniques, and resources, allowing them to make informed choices about how to approach their writing tasks. This guidance empowers learners to take charge of their learning journey and make deliberate decisions that align with their learning objectives.

Creating a Supportive Environment

Effective teachers cultivate a supportive environment that nurtures learners' autonomy (Yeung, 2016). This environment encourages risk-taking, experimentation, and self-expression. Teachers create safe spaces where learners can voice their opinions, share their writing experiences, and seek advice without fear of judgment. Such an environment is conducive to learners' confidence and their willingness to embrace autonomy.

Providing Constructive Feedback

Teachers offer constructive feedback that promotes critical thinking and reflection (Yeung, 2016). Rather than merely correcting errors, teachers guide learners to identify strengths and areas for improvement in their writing. This feedback encourages metacognitive awareness, enabling learners to develop a deeper understanding of their writing process and make informed choices for improvement (Yeung, 2016).

Tailoring Instruction to Individual Needs

Recognizing that each learner's autonomy journey is unique, teachers tailor their instruction to address individual needs (Sheerah & Yadav, 2022). They take into account learners' preferences, learning styles, and goals when designing writing tasks and assignments. By catering to individual differences, teachers empower learners to engage with the writing process in a way that resonates with them personally (Sheerah & Yadav, 2022).

Promoting Collaborative Learning

Teachers foster collaborative learning environments where learners can share ideas, offer peer feedback, and engage in discussions (Benson & Lamb, 2020). Collaborative interactions provide learners with diverse perspectives and insights, expanding their understanding of effective writing practices. Through collaboration, learners learn from each other's experiences and develop a sense of community.

Nurturing Critical Thinking

Effective teachers encourage learners to question assumptions, analyze different viewpoints, and critically evaluate their own writing (Benson, 2011). By nurturing critical thinking skills, teachers empower learners to make informed decisions about their writing choices, enhancing the quality and depth of their compositions.

In conclusion, the role of EFL teachers in fostering autonomy in writing is transformative. From facilitators of learning to creators of supportive environments, teachers guide learners toward becoming self-directed writers. Their role involves providing guidance, offering constructive feedback, and promoting collaborative learning, all of which contribute to learners' development as autonomous writers. As educators embrace this evolved role, they empower learners to engage with the writing process in ways that not only enhance their skills but also cultivate their autonomy and lifelong learning habits.

Teachers and Learners' Perceptions of Autonomy in Learning EFL Writing

Autonomy in language learning has gained significant attention as an effective approach to enhance learners' motivation, engagement, and language proficiency. However, the perceptions of teachers and learners regarding autonomy in EFL writing remain a crucial aspect to consider for successful implementation. Understanding the perceptions of both teachers and learners regarding autonomy in EFL writing is crucial for effective instructional design and implementation. This section aims to explore the perceptions of teachers and learners of autonomy in learning EFL writing, shedding light on their perspectives, challenges, and benefits associated with autonomous learning.

Teachers' Perceptions

Teachers' perceptions of autonomy in EFL writing are shaped by a variety of factors, including their educational background, teaching experience, and cultural context. Research indicates that teachers generally recognize the importance of autonomy in EFL writing and

view it as a valuable approach to promote learners' creativity, critical thinking, and self-expression (Benson, 2003; Little, 2007).

One of the key aspects emphasized by teachers is the role of autonomy in developing learners' self-confidence. When learners have the freedom to make choices and take ownership of their writing process, they become more confident in expressing their ideas and opinions. Autonomy also contributes to the development of learners' decision-making skills, enabling them to analyze different options and make informed choices about their writing strategies (Holec, 1981).

Furthermore, autonomy in EFL writing is perceived by teachers as a means to enhance learners' intrinsic motivation. When learners have control over their writing topics, goals, and strategies, they are more likely to be engaged and motivated to improve their writing skills. Autonomy allows learners to connect their writing tasks to their personal interests and experiences, making the writing process more meaningful and enjoyable (Little, 2007).

However, despite recognizing the benefits of autonomy in EFL writing, teachers may express concerns about its implementation in the classroom. One of the primary challenges cited by teachers is related to curriculum constraints. Teachers often have to adhere to a prescribed curriculum that may limit the opportunities for learners to exercise autonomy in their writing. Additionally, assessment requirements can pose challenges, as standardized assessments may prioritize specific writing formats or structures, leaving limited room for learner autonomy (Benson, 2003).

Time limitations also present a significant challenge for teachers when implementing autonomy in EFL writing. Incorporating autonomous learning activities and providing individualized feedback to learners can be time-consuming, especially in large class sizes or when teachers have multiple responsibilities. These constraints may lead to teachers feeling

overwhelmed and finding it challenging to strike a balance between fostering learner autonomy and meeting other instructional demands (Little, 2007).

Despite these challenges, teachers recognize the potential benefits of autonomy in EFL writing and strive to create a supportive learning environment that encourages learner autonomy. They may adopt various strategies to promote autonomy, such as providing choices in writing topics, allowing learners to set their own goals, and facilitating peer collaboration and self-assessment. Teachers also aim to offer guidance and scaffolding to support learners' autonomous learning process, ensuring that learners have the necessary resources and strategies to succeed (Little, 2007).

In conclusion, teachers generally perceive autonomy in EFL writing as valuable for promoting learners' creativity, critical thinking, self-expression, self-confidence, decision-making skills, and intrinsic motivation. However, challenges related to curriculum constraints, assessment requirements, and time limitations can hinder the full implementation of autonomy in the classroom. Despite these challenges, teachers acknowledge the potential benefits and strive to create an environment that supports and encourages learner autonomy in EFL writing.

Learners' Perceptions

Learners' perceptions of autonomy in EFL writing are influenced by their prior learning experiences, cultural background, and individual learning preferences. Research suggests that learners generally value autonomy in EFL writing as it offers them opportunities to explore their interests, express their ideas, and take ownership of their learning (Littlewood, 1996; Benson, 2011).

One of the primary benefits of autonomy in EFL writing, as perceived by learners, is the freedom to choose writing topics. When learners have the autonomy to select topics that interest them, they are more likely to be motivated and engaged in the writing process.

Autonomy allows learners to connect their writing tasks to their personal experiences, making the writing more meaningful and relevant to their lives (Benson, 2011). This personal connection enhances learners' motivation and encourages them to invest more effort and time into their writing assignments.

Another aspect highly valued by learners is the ability to set goals and determine their own writing strategies. Autonomy in EFL writing allows learners to define their objectives and adopt writing approaches that suit their individual needs and preferences. By having the freedom to choose strategies and techniques that work best for them, learners can develop their writing skills in a way that aligns with their learning style and strengths (Benson, 2011). This sense of agency and control over their learning process contributes to learners' overall satisfaction and engagement with their writing tasks.

Furthermore, autonomy in EFL writing empowers learners to develop self-directedness and a sense of responsibility for their own learning. By taking ownership of their writing process, learners become more aware of their strengths and weaknesses, enabling them to make informed decisions to improve their writing skills (Littlewood, 1996). Autonomy fosters self-regulation skills, such as planning, monitoring, and evaluating their writing progress, which are essential for lifelong learning beyond the classroom.

However, learners may also encounter challenges when engaging in autonomous EFL writing. Self-regulation can be a demanding task, requiring learners to manage their time effectively, set realistic goals, and monitor their progress. Some learners may struggle with self-discipline and find it challenging to maintain motivation and consistency in their writing practice (Benson, 2001). Lack of guidance and structure can also be perceived as a challenge, as learners may require support and feedback from teachers to navigate their autonomous learning journey effectively.

Despite these challenges, learners generally perceive autonomy in EFL writing as a valuable approach that enhances their motivation, engagement, and overall writing proficiency. The sense of ownership, personal relevance, and freedom to make choices, all contribute to a positive learning experience, fostering a deeper connection with the writing process and a greater sense of accomplishment upon completing writing tasks (Benson, 2011).

In conclusion, learners' perceptions of autonomy in EFL writing are influenced by their prior learning experiences, cultural background, and individual learning preferences. Learners value the freedom to choose writing topics, set goals, and select appropriate writing strategies according to their interests and needs. Autonomy empowers learners to develop self-directedness and responsibility for their learning, but challenges related to self-regulation and lack of guidance may arise. Nevertheless, learners perceive autonomy in EFL writing as a valuable approach that enhances motivation, engagement, and overall writing proficiency.

Conclusion

The first chapter of this study was devoted to the discussion of EFL writing skill and EFL learners' autonomy in writing; thus, the chapter consists of two sections. The first section, which was entitled "writing skills", was concerned mainly with investigating the nature of writing shedding the light on its different types and on the key components of the writing framework. The importance of teaching and learning the writing skill for EFL students is highlighted via presenting the different types of teaching writing approaches and strategies and pointing out the strengths and weaknesses of each approach and strategy; also the main factors contributing to EFL learners' constraints in writing were addressed. While the second section of the present chapter dealt with the concept of "autonomy in writing". It started with defining autonomy and highlighted its significance in language learning in general and in writing in particular. It traced back to the theoretical framework of learner autonomy in language learning via presenting the different theories and approaches of

autonomy in language learning, and particularly in writing. Then, the factors influencing learner autonomy in writing were discussed along with the teachers' and learners' perceptions of autonomy in learning EFL writing.

Chapter Two

Chapter Two: Feedback in Language Learning and Teaching

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Chapter Two: Feedback in Language Learning and Teaching

In the field of English as a Foreign Language (EFL) writing instruction, the provision of feedback plays a core role in shaping learners' language development and writing proficiency. Feedback, in its multifaceted forms, serves as a guiding force that navigates learners through the intricate landscape of language expression. As the pedagogical landscape evolves, the integral role of feedback in shaping learners' linguistic development cannot be overlooked and the exploration of feedback in EFL writing takes on a dynamic significance.

In this context, the present chapter is devoted mainly to investigate the multi-dimensional nature of feedback assumes within EFL writing contexts, exploring its significance in EFL writing instructional context, its impact on writing proficiency and learners autonomy, its various types, student perceptions and strategies for effective implementation. By delving into the nexus between feedback and EFL writing, we embark on a journey to decipher the intricate nature of writing skill for EFL learners.

Significance of Feedback in EFL Writing Instructional Context

In the realm of language education, feedback stands as a critical linchpin that connects learners with the intricacies of language acquisition and skill development. The significance of feedback in language learning transcends its traditional role as a mere mechanism for error correction; it encompasses a dynamic process that plays a pivotal role in fostering learners' linguistic growth, communicative competence, and writing proficiency. Drawing from the insights of Hyland and Hyland (2006) and Petchprasert (2012), this section delves into the multifaceted significance of feedback in the context of language learning, particularly focusing on its implications for second language writing.

Communication tool between educators and learners

At its core, feedback serves as a communication tool that facilitates a reciprocal exchange between educators and learners. Researchers emphasize that feedback serves as a conduit

through which learners gain insights into the effectiveness of their language use and writing strategies. It acts as a mirror that reflects the strengths and areas for improvement in their linguistic endeavors. This reflective aspect of feedback is crucial, as it enables learners to engage in meta-cognitive processes, deepening their understanding of their writing processes and linguistic choices (Hyland, 2006).

Bridge gap between learners' proficiency and their goals

Furthermore, feedback holds the power to bridge the gap between learners' current linguistic proficiency and their desired goals. Petchprasert (2012) underscores that constructive feedback acts as a guiding force that aligns learners' efforts with the standards of language proficiency they aspire to attain. In this way, feedback propels learners forward by providing a clear trajectory for improvement and skill enhancement.

A transformative force in prompting writing skills.

In the context of second language writing, feedback operates as a transformative force that molds learners' writing skills. The feedback loop initiates a dialogue wherein learners receive information about their writing, internalize it, and subsequently apply it in their future writing endeavors. This cyclical process enables learners to incrementally refine their writing techniques, leading to enhanced clarity, coherence, and grammatical accuracy (Klimova, 2015).

Cultivates learners' autonomy

Crucially, the significance of feedback extends beyond its immediate impact on linguistic proficiency. Feedback cultivates learners' autonomy by fostering their ownership over the learning process. Through the iterative feedback process, learners develop the capacity to critically evaluate their own work, identify areas for improvement, and make informed decisions about their writing choices. This empowerment nurtures learners' agency, equipping them with the skills needed for lifelong learning and effective communication (Kao, 2013).

Fostering Learner Engagement and Motivation

Another profound significance of feedback in language learning, as illuminated, lies in its ability to fuel learner engagement and motivation. Feedback injects a sense of purpose and relevance into the learning process by providing learners with a tangible connection between their efforts and their language development. Constructive feedback, delivered with care and specificity, communicates to learners that their progress is valued and acknowledged (Farahian & Noori, 2023).

Feedback, when thoughtfully designed, has the potential to trigger a positive emotional response, nurturing a sense of achievement and satisfaction. This emotional resonance not only spurs learners to invest more effort into their writing tasks but also cultivates a positive attitude toward language learning as a whole. When learners perceive that their efforts yield discernible results, their motivation to engage with writing tasks increases, leading to a cycle of heightened involvement and improved performance (Farahian & Noori, 2023).

Empowering Meta-cognitive Awareness

Feedback, as discussed by Cardelle & Corno, (1981), serves as a powerful agent for the development of meta-cognitive skills—learners' awareness of their own cognitive processes. Constructive feedback prompts learners to critically evaluate their writing choices, consider alternatives, and reflect on their language use. This reflective process enhances learners' meta-cognitive awareness, enabling them to become more strategic, deliberate writers.

Meta-cognition is instrumental in fostering autonomous learning. When learners become attuned to their thinking processes, they gain the ability to self-regulate their writing, identifying and rectifying errors, inconsistencies, and areas for improvement independently. This transferable skill extends beyond the immediate context of writing, empowering learners to engage in self-directed learning across various domains (Yamson & Borong, 2022).

Nurturing a Growth Mindset

Feedback plays a pivotal role in shaping learners' mindset—a critical factor in their attitude toward challenges and their willingness to persevere. Well-structured feedback can help learners adopt a growth mindset—a belief that intelligence and abilities can be developed through effort and learning. When learners receive feedback that emphasizes progress, improvement, and the malleability of skills, they are more likely to view setbacks as opportunities for growth rather than as indicators of inadequacy (Carpenter, 2018).

Carpenter (2018) suggests that a growth mindset cultivated through feedback leads to increased resilience in the face of challenges. Learners who embrace a growth mindset are more likely to seek out additional feedback, experiment with different writing strategies, and persist in refining their skills. This mindset shift transforms setbacks into steppingstones, encouraging learners to view the language learning journey as an evolving and rewarding endeavor.

In conclusion, the significance of feedback in language learning, particularly within the domain of second language writing, cannot be overstated. It serves as a multifunctional tool that guides learners' linguistic growth, bridges the gap between current and desired proficiency levels, and cultivates learners' autonomy. As educators understanding the profound impact of feedback allows us to harness its potential to shape proficient and empowered language users. Feedback holds multifaceted significances that extend beyond mere error correction. It ignites learner engagement and motivation, empowers meta-cognitive awareness, and nurtures a growth mindset. By harnessing the potential of feedback, educators can create an environment that not only enhances linguistic proficiency but also fosters learners' intrinsic motivation, autonomy, and resilience.

Significance of Feedback in EFL Writing Proficiency Development

Proficient writing is a fundamental skill in language acquisition, enabling individuals to convey thoughts, ideas, and information coherently and persuasively. The process of improving writing skills involves not only the acquisition of grammatical accuracy but also the mastery of organizational structure, clarity of expression, and audience engagement..etc. Constructive feedback plays a pivotal role in guiding students along this path of skill development which requires continuous refinement (Jubhari, Sasabone, & Nurliah, 2022, Hinkel, 2003)

The impact of feedback on writing proficiency is not limited to mechanical correctness; it extends to fostering critical thinking and analytical skills (Liu & Yu, 2022). Constructive feedback prompts learners to think critically about their ideas, arguments, and evidence, encouraging them to refine their content and present it persuasively. Furthermore, feedback can serve as a bridge between language learning and real-world communication, aligning learners' writing with the conventions and expectations of their target discourse communities (Wahyuni, 2017). Through an exploration of existing research and studies, we aim to shed light on how well constructed feedback can contribute to the improvement of writing proficiency including writing accuracy and writing quality.

Significance of Feedback in Writing Accuracy and Quality

First, *writing accuracy* in a second language involves a nuanced understanding of grammar, vocabulary, syntax, and discourse structure (Sharma, 1979). Constructive feedback, provided by educators or peers, offers learners insights into areas of improvement and strategies to enhance these writing sub-skills (Rollinson, 2005).

Feedback often includes suggestions to diversify vocabulary and avoid repetitive word choices (Garcia, 2021). By incorporating new words and synonyms, individuals can enrich their language expression, making it more engaging and dynamic (Lee, 2017).

Additionally, feedback on *grammatical errors* and sentence structure empowers individuals to correct mistakes that might hinder the flow of their expression (Miller, 2019). Over time, consistent feedback helps internalize proper grammatical rules and syntactical constructs, leading to smoother language usage (Parker, 2020).

Second, the relationship between feedback and writing *quality* is crucial in the process of improving one's writing skills. Feedback refers to the information, opinions, suggestions, and evaluations provided by others about a piece of writing. Writing quality, on the other hand, pertains to the overall *organization* (coherence and cohesion) and *content* (clarity, focus and unity) of a written piece. By focusing on specific aspects of their writing, such as clarity, organization, and coherence, learners can systematically address weaknesses and build on their strengths. This process not only refines their writing abilities but also contributes to the development of broader language skills.

Over time, consistent engagement with feedback can lead to a noticeable improvement in writing quality. As writers internalize lessons from feedback, they tend to produce more polished and impactful *content* (Kaya et al., 2020). Constructive feedback helps individuals identify areas where their language expression lacks *clarity* or precision (Smith, 2018). With specific examples and suggestions, feedback guides them to use more concise and accurate language (Johnson, 2020). This process aids in avoiding ambiguity in unclear ideas and ensures that the intended message is conveyed effectively and clearly (Brown, 2019). Furthermore, effective feedback provides guidance on communication aspects like tone, and *organization*. Implementing such feedback helps writers enhance their ability to convey ideas *coherently, cohesively, and persuasively* (Yu, 2021; Mahmoudi & Bugra, 2020).

Significance of Feedback Beyond Mechanical/ Technical Writing Skills

Constructive feedback not only improves technical writing skills but also cultivates higher-order cognitive abilities. The skills honed through feedback in language writing often extend beyond communication (Carter, 2016).

Feedback comes from diverse sources, such as peers, instructors, editors, or readers. Each perspective offers unique insights into the writing, helping the writer understand how different audiences perceive their work. Effective feedback often emphasizes tailoring language expression to *the intended audience* and highlights instances where the intended message is not effectively reaching the audience (Smith, 2018). This awareness about the target audience helps writers tailor their writing to better suit the needs and preferences of their target readers (Rodríguez & Mosquera, 2020; Al-Jarf, 2022). Also, adapting communication style and tone based on feedback enables individuals to connect better with their readers or listeners, ensuring greater engagement (Johnson, 2020). This can lead to more refined and effective communication (Rodríguez & Mosquera, 2020; Yu, 2021; Al-Jarf, 2022).

In addition to audience engagement, Feedback helps individuals understand the nuances of language usage in different *contexts* (Carter, 2016). This includes *appropriate language* for formal communication, professional emails, academic writings and more (Davis, 2018). Adjusting the writing to suit the context enhances writing effectiveness (Wilson, 2022)

Receiving feedback encourages writers to distance themselves from their work emotionally and view it more *objectively*. This detachment allows them to make necessary changes without being overly attached to their original words (Hamidun et al., 2012). Furthermore, Students engaging with feedback develop *critical thinking* skills by evaluating their work and incorporating alternative perspectives. Feedback requires writers to critically evaluate their own work and make informed decisions about changes. This Analytical process

can enhance their critical thinking skills their ability to communicate effectively and persuasively (Gao et al., 2023; Rodríguez & Mosquera, 2020; Kepner, 1991).

In academic and professional settings, regular feedback fosters a culture of continuous learning and improvement (Miller, 2019). Individuals who value feedback seek opportunities to refine their language expression skills, keeping up with evolving language trends and adapting to changes in communication norms (Parker, 2020).

In sum, constructive feedback provision leads to noticeable enhancements in students' writing proficiency. This improvement is particularly evident in the refinement of specific weaknesses, such as grammar usage and coherence. Beyond rectifying these writing weaknesses, feedback fosters critical thinking, iterative improvement, and the holistic development of proficient communication skills. As educators harness the power of constructive feedback, they empower students to articulate their ideas with precision and eloquence, fostering language proficiency and effective communication and contributing to both personal development and professional success.

Students' Perceptions of Feedback

The process of writing involves not only the arrangement of words and sentences but also the articulation of ideas, the organization of thoughts, and the presentation of coherent arguments. Given the complexity of this endeavor, students often benefit immensely from external input that guides them toward refined language expression. Feedback, in this regard, serves as a bridge between instructional efforts and students' writing development. By offering insights into areas for improvement and highlighting strengths, feedback facilitates a dynamic learning process that nurtures critical thinking, effective communication, and self-awareness.

While the significance of feedback in enhancing writing skills is widely acknowledged, the lens through which students perceive and interpret feedback holds equal importance. Student perceptions play a pivotal role in determining how feedback is received, internalized,

and subsequently integrated into their writing practices. These perceptions are influenced by factors such as personal writing goals, prior experiences with feedback, cultural backgrounds, and learning styles. Exploring these perceptions provides a comprehensive understanding of how students interact with feedback, adapt their writing strategies, and ultimately cultivate their language expression skills.

Factors Affecting Students' Perceptions of Feedback

Understanding students' attitudes towards feedback is essential for educators, researchers, and institutions aiming to enhance the effectiveness of feedback mechanisms and promote more meaningful learning experiences. Students' attitudes play a central role in how they perceive, receive, and utilize feedback, ultimately influencing their writing improvement and overall academic development. To comprehensively explore students' attitudes towards feedback, several key aspects need to be considered:

Perception of Feedback's Value

Students' perceptions of the value of feedback greatly impact their willingness to engage with it. Positive attitudes are often associated with recognizing feedback as an opportunity for growth and improvement. Conversely, negative attitudes might stem from seeing feedback as criticism or ascribing little importance to it. Understanding how students perceive the intrinsic worth of feedback can provide insights into their receptiveness to constructive input (Wu, Dixon & Zhang 2021).

Emotional Response to Feedback

Feedback can evoke emotional responses, ranging from satisfaction and motivation to frustration and demotivation. Positive feedback can boost confidence and enthusiasm for learning, while overly critical or vague feedback might lead to discouragement. Exploring students' emotional reactions helps identify factors that contribute to their attitudes, allowing

educators to provide feedback in a manner that encourages positive emotional engagement (Agius & Wilkinson (2014).

Impact on Self-Efficacy

Students' attitudes towards feedback are closely linked to their self-efficacy beliefs, which refer to their confidence in their ability to improve based on feedback. Constructive feedback that offers actionable suggestions can bolster self-efficacy, empowering students to see challenges as opportunities for growth. On the other hand, poorly communicated feedback may erode self-confidence and hinder progress (Ruegg, 2018).

Feedback Receptivity and Openness

Attitudes influence students' openness to receiving and using feedback. A growth-oriented mindset, characterized by a willingness to learn from feedback, is associated with a more positive attitude. Students who view feedback as a means of enhancing their skills are more likely to actively seek and incorporate feedback into their writing processes (Simpson, 2006).

Cultural and Contextual Influences

Cultural backgrounds and educational contexts can shape students' attitudes towards feedback. Some cultures emphasize respect for authority figures, potentially affecting how students perceive feedback from instructors. Similarly, students' prior experiences with feedback influence their attitudes, as positive experiences tend to foster more favorable perceptions (Zaman & Azad, 2012).

Feedback Delivery Preferences

Students' preferences for feedback delivery methods, such as written comments, verbal discussions, or peer assessments, reflect their attitudes towards the feedback process. Understanding these preferences helps educators tailor feedback delivery to match students' learning styles, enhancing the likelihood of its positive reception (Weaver, 2006).

Perceived Teacher-Student Relationship

The quality of the teacher-student relationship can impact students' attitudes towards feedback. A supportive and approachable instructor fosters a conducive environment for open communication and constructive feedback exchange, contributing to positive attitudes (Marie, 2016).

Motivation and Goal Alignment

Students' motivations and goals for learning influence their attitudes towards feedback. Those who are intrinsically motivated to improve their writing skills tend to have more positive attitudes towards feedback, as they see it as a means of achieving their personal goals (Kuyyogsuy, 2019).

Feedback Implementation and Improvement

Ultimately, students' attitudes towards feedback are reflected in how effectively they apply received feedback to improve their writing. Positive attitudes are often linked to active engagement with feedback, leading to visible progress in their language expression skills over time (McMartin-Miller, 2014).

By studying these various dimensions of students' attitudes towards feedback, educators can gain insights into the factors that shape students' perceptions, receptivity, and engagement with feedback. These insights can inform the design of feedback strategies that foster positive attitudes, enhance writing improvement, and contribute to a more holistic and effective learning experience.

Exploring How Student Beliefs Shape their Reception of Feedback

Student beliefs play a pivotal role in shaping how they receive, interpret, and respond to feedback. These beliefs, often formed through prior experiences, cultural influences, and personal attitudes, significantly influence the impact of feedback on their learning and development. Understanding the intricate interplay between student beliefs and the reception

of feedback provides valuable insights into the feedback process and how educators can tailor their approaches for optimal outcomes.

Fixed vs. Growth Mindset

One of the central beliefs influencing feedback reception is the mindset students adopt. Carol Dweck's theory of mindset proposes two main categories: fixed mindset and growth mindset. In a fixed mindset, students believe their abilities are static, and feedback can be taken as a judgment of their inherent capabilities. In contrast, a growth mindset fosters the belief that skills can be developed over time, leading to a more receptive attitude towards feedback as a means to enhance those skills. Students with a growth mindset are more likely to view feedback as a constructive tool for improvement rather than as an assessment of their abilities (Pearson,2022).

Feedback as Assessment vs. Feedback as Learning

Students' beliefs about the purpose of feedback shape their reception. Some students might perceive feedback solely as a means of evaluation, focusing on grades and judgments. Others view feedback as an opportunity to learn and develop, considering it as valuable input to enhance their understanding and skills. Educators' efforts to emphasize the developmental aspect of feedback can help shift students' perceptions from seeing it as judgment to recognizing it as a pathway to improvement (Weaver, 2006).

Self-Efficacy and Feedback

Students' self-efficacy beliefs, their confidence in their ability to execute tasks, directly influence how they receive feedback. Students with high self-efficacy are more likely to interpret feedback positively, seeing it as a means to further enhance their performance. In contrast, low self-efficacy can lead to defensive responses to feedback, where students may reject or ignore feedback that challenges their beliefs about their own capabilities (Pearson et al., 2019).

Attribution Theory and Feedback

Attribution theory suggests that individuals attribute success or failure to different factors, either internal (e.g., effort, ability) or external (e.g., luck, task difficulty). Students who attribute success to internal factors and failure to external factors are more likely to perceive feedback as valuable for improvement. Conversely, those who attribute success solely to external factors might be less receptive to feedback, assuming that any shortcomings are beyond their control (Foote, 1999).

Cultural and Contextual Influences

Cultural norms and educational contexts shape students' beliefs about authority, hierarchy, and communication. These beliefs can impact how students perceive feedback from instructors, peers, or other sources. Educators should consider cultural variations to ensure feedback aligns with students' expectations and beliefs (Evans & Waring, 2016).

Feedback Past Experiences

Prior experiences with feedback, whether positive or negative, influence how students approach new feedback. Positive experiences can foster open-mindedness and receptiveness, while negative experiences might lead to skepticism or anxiety. Addressing these past experiences and creating a supportive feedback environment can mitigate potential barriers (Leavitt & Mueller, 1951).

Beliefs about Improvement Pace

Some students hold beliefs about the speed of improvement. Students who expect rapid progress might become frustrated if feedback suggests incremental changes. Educators can help by setting realistic expectations and emphasizing that improvement is a gradual process (Zhang & Hyland, 2018).

Understanding the intricate relationship between student beliefs and feedback reception allows educators to tailor feedback strategies effectively. By fostering a growth mindset,

emphasizing learning over assessment, boosting self-efficacy, addressing cultural nuances, and acknowledging individual experiences, educators can create an environment where feedback is received positively. This, in turn, maximizes the potential for students to embrace feedback as a tool for continuous improvement, enhancing their language expression skills and overall academic growth.

The Motivational Aspect: How Positive Feedback Impacts Writing Progress

Positive feedback serves as a powerful catalyst for driving writing progress and enhancing overall language expression skills. While constructive criticism plays a vital role in refining writing abilities, the motivational impact of positive feedback should not be underestimated. Positive feedback creates a dynamic feedback loop that not only boosts students' confidence but also fuels their intrinsic motivation to engage more deeply with the writing process (Hattie & Timperley, 2007). This section explores how positive feedback influences writing progress and contributes to the development of proficient language expression.

Fostering Confidence and Self-Efficacy

Positive feedback acts as a validation of students' efforts, reinforcing their belief in their writing capabilities. When students receive recognition for their strengths and improvements, their self-confidence grows, leading to an increased willingness to take risks in their writing endeavors. As their self-efficacy—the belief in their ability to achieve—improves, students become more open to challenges and are more likely to invest time and effort in honing their language expression skills (Mills, 2014).

Encouraging Growth Mindset

A growth mindset, the belief that skills can be developed through effort and learning, is closely tied to positive feedback. When students receive positive feedback that highlights their progress, they are more likely to perceive challenges as opportunities for growth rather than as obstacles. This mindset shift encourages students to embrace feedback as a means of

continuous improvement, propelling them to actively seek out ways to refine their writing techniques (Truax, 2018).

Enhancing Intrinsic Motivation

Positive feedback taps into students' intrinsic motivation, fostering a genuine enthusiasm for writing. When students experience the gratification of their efforts being recognized, they are more inclined to engage in writing activities out of genuine interest rather than mere obligation. This intrinsic motivation fuels a self-driven pursuit of excellence, leading to a more dedicated and passionate approach to language expression (Alberth, 2019).

Cultivating a Positive Writing Identity

Feedback that emphasizes strengths and achievements contributes to the development of a positive writing identity. As students receive affirmation for their unique writing styles and creative expressions, they begin to see themselves as capable and creative writers. This positive self-perception becomes an integral part of their writing identity, influencing their commitment to refining their language expression skills (McCarthy & Dempsey, 2017).

Establishing a Supportive Learning Environment

Positive feedback helps create a supportive and encouraging learning environment. When students feel valued and acknowledged for their progress, they are more likely to actively participate in discussions, peer reviews, and collaborative writing activities. This collaborative atmosphere nurtures a sense of community, where students inspire and motivate each other to excel in their language expression endeavors (Shegay et al., 2020).

Promoting Continuous Engagement

The motivational boost from positive feedback contributes to sustained engagement with writing tasks. When students experience the joy of accomplishment and the sense of progress, they are more likely to maintain consistent writing habits. This persistence leads to a

deeper exploration of language nuances, improved critical thinking, and ultimately, elevated language expression skills (Tomlinson, 1983).

In conclusion, the motivational impact of positive feedback on writing progress cannot be overstated. By fostering confidence, encouraging a growth mindset, enhancing intrinsic motivation, cultivating a positive writing identity, establishing a supportive learning environment, and promoting continuous engagement, positive feedback becomes a driving force behind students' language expression development. By harnessing the power of positive feedback, educators empower students to not only refine their writing skills but also to embark on a lifelong journey of meaningful language expression.

Strategies for Effective Implementation of Feedback in EFL Writing

The process of mastering EFL writing is a multifaceted endeavor that requires more than just grammatical accuracy and vocabulary proficiency. Constructing coherent and expressive written communication demands a nuanced understanding of language conventions, rhetorical strategies, and cultural nuances. In this pursuit, the role of feedback becomes paramount. Effective feedback serves as a bridge between the acquisition of language skills and their practical application in writing, offering students the guidance needed to refine their expression and navigate the complexities of EFL writing.

The implementation of feedback strategies in EFL writing holds the potential to transform the learning experience, fostering a collaborative and growth-oriented environment where students actively engage in their language development. Instructors and educators play a pivotal role in designing and employing strategies that not only provide students with constructive input but also motivate and empower them to enhance their language expression capabilities.

Designing Timely and Targeted Feedback Delivery

Effective feedback delivery is a cornerstone of successful language instruction, particularly in the realm of EFL writing. When feedback is provided in a timely and targeted manner, it has the potential to significantly impact students' language expression skills by offering them actionable insights for improvement. This section explores the intricate process of designing timely and targeted feedback delivery strategies in the context of EFL writing, highlighting the benefits, challenges, and best practices that educators can employ to optimize the feedback experience.

Benefits of Timely and Targeted Feedback

Relevance and Contextualization. Timely feedback is directly related to the recent writing task, ensuring that students can connect the feedback with their current learning objectives. This relevance enhances students' understanding of the specific areas they need to address for improvement (Baird, 2012).

Immediate Learning. Timely feedback capitalizes on the "teachable moment," where students are most receptive to understanding and integrating new concepts. Immediate feedback allows students to address misunderstandings and errors before they become ingrained habits (Hounsell, 2007).

Motivation and Engagement. When students receive feedback while the writing task is still fresh in their minds, it fosters a sense of engagement and motivation to implement suggested changes. The feedback becomes a catalyst for refinement rather than a retrospective assessment (Lo & Hyland, 2007).

Confidence Building. Timely feedback reinforces students' confidence in their writing abilities. Immediate recognition of their efforts and areas of improvement validates their work, bolstering their self-assurance and willingness to take risks in their language expression (Gurbutt & Houston, 2021).

Challenges of Timely and Targeted Feedback

Time Constraints. Delivering feedback promptly can be challenging for educators, especially when dealing with a large number of students or complex writing assignments. Balancing the need for quality feedback with time limitations is crucial (French et al. 2015).

Individualization. Targeted feedback requires an understanding of each student's specific needs. Crafting individualized feedback for diverse learners can be time-consuming and demanding (Henderson, 2019).

Balancing Praise and Constructive Criticism. Timely and targeted feedback must strike a balance between acknowledging strengths and highlighting areas for improvement. Providing both aspects effectively can be intricate (Deorio, 2022).

Best Practices for Implementation

Prioritize High-Impact Feedback. Focus on aspects that have the most significant impact on students' writing progress. Addressing critical grammar errors, clarity, and organization should take precedence in feedback delivery (Underwood & Tregidgo, 2006).

Use Rubrics and Guidelines. Develop clear rubrics or guidelines for different writing tasks. This ensures that feedback aligns with established criteria and helps students understand the specific aspects being evaluated (Wang, 2017).

Formative Assessment. Incorporate formative assessment techniques, such as peer reviews or self-assessment, to distribute feedback responsibility. This approach not only eases the educator's workload but also encourages collaborative learning.

Automated Tools. Utilize technology-driven tools that offer automated feedback on grammar and syntax, allowing educators to focus on higher-level feedback that requires human judgment (Wilson & Andrada, 2016).

Scheduled Feedback Sessions. Set specific times for feedback dissemination, creating a consistent rhythm that students can anticipate. This approach prevents delays and aligns with students' expectations (Chandler, 2003).

Feedback as a Conversation. Encourage students to engage with feedback as part of an ongoing conversation. Provide opportunities for clarification and additional guidance to ensure feedback is comprehended and internalized (Thompson & Lee, 2012).

In summary, timely and targeted feedback delivery in EFL writing is a powerful instructional strategy that capitalizes on students' receptivity, motivation, and learning momentum. Educators who master this art find themselves not only enhancing language expression skills but also fostering a culture of continuous improvement and reflective learning. By overcoming challenges through thoughtful planning, leveraging technology, and prioritizing impactful feedback, educators can effectively navigate the complexities of feedback delivery, ensuring that students reap the maximum benefits from their language expression journey.

Encouraging Actionable Feedback: A Focus on Revision

The process of receiving feedback in EFL writing becomes truly effective when students are empowered to take meaningful action based on the feedback provided. One of the key strategies to achieve this is by emphasizing the importance of revision. In this section, we delve into the concept of encouraging actionable feedback through a focus on revision in EFL writing. We explore how educators can guide students to leverage feedback as a catalyst for substantial improvement, ultimately enhancing their language expression skills.

The Role of Revision in Feedback Process

Revision is a fundamental aspect of the writing process, and it becomes even more crucial when feedback is involved. Encouraging students to revisit their work based on received feedback enables them to apply the insights gained from the feedback in a practical manner. It

transforms feedback from a static evaluation to a dynamic learning process, aligning with the principles of active and engaged learning (Li, & Lin, 2007).

Benefits of Emphasizing Revision

Concrete Application. Revision transforms abstract feedback into tangible changes in the written piece. It prompts students to address specific areas of improvement, leading to a refined final product (Roscoe et al., 2015).

Deeper Understanding. Through revision, students engage in a process of deeper comprehension. They internalize the feedback by actively working on suggested changes, which enhances their understanding of language nuances and writing techniques (Fitzgerald, 1987).

Ownership and Agency. Revision empowers students to take ownership of their writing and learning journey. By making informed choices about changes, students actively shape their language expression and writing style (Woo, Chu & Li, 2013).

Learning from Mistakes. Emphasizing revision normalizes the idea that mistakes are opportunities for growth. Students learn to view feedback as a roadmap for addressing errors and honing their language skills (Muliyah et al., 2020).

Strategies for Encouraging Actionable Feedback through Revision

Clear Revision Guidelines. Provide students with specific guidelines on how to approach revision based on the feedback. Clearly outline the areas they need to address and the goals they should strive for (Chandler, 2003).

Feedback Integration Tasks. Design tasks that specifically require students to incorporate feedback into their revisions. For instance, ask them to rewrite a paragraph using the suggested changes (Myhill & Jones, 2007).

Peer Review and Collaboration. Incorporate peer review sessions where students provide feedback to each other and then collaboratively revise their work. This not only

distributes the feedback load but also promotes collaborative learning (Rouhi & Azizian, 2013).

Feedback Reflection Component. Include a reflective component in the revision process where students explain how they incorporated the feedback and the thought process behind their changes (Duijnhouwer, 2010).

Progressive Revision. Encourage iterative revision by asking students to revise their work multiple times based on different aspects of feedback. This gradual approach ensures that feedback is fully integrated (Van Bramer & Bastin, 2013).

Feedback as a Dialogue. Create an open channel for students to seek clarification on feedback during the revision process. This dialogue fosters a deeper understanding of the suggestions (Schillings et al., 2021).

Emphasizing revision as a response to feedback transforms the feedback process from a one-time evaluation to an ongoing journey of growth. By guiding students to actively apply feedback, educators instill a sense of agency, ownership, and continuous improvement in their language expression endeavors. This strategy not only enhances EFL writing skills but also equips students with a lifelong approach to learning and refinement. Through well-structured revision practices, educators pave the way for students to harness the power of feedback as a tool for profound enhancement and elevated language expression.

Fostering Collaborative Feedback: Peer Review and Group Discussions

In the realm of EFL writing, feedback is not solely the domain of instructors; it can also be a collaborative effort among peers. Embracing collaborative feedback strategies, such as peer review and group discussions, can lead to enriched language expression experiences. This section delves into the dynamics of fostering collaborative feedback through peer review and group discussions, elucidating the advantages, challenges, and effective practices for implementing these strategies in EFL writing instruction.

Advantages of Collaborative Feedback

Diverse Perspectives. Peer review brings diverse viewpoints to the feedback process. Peers from various linguistic backgrounds can offer unique insights and suggestions, broadening students' understanding of language expression (Rollinson, 2005).

Active Engagement. Peer review encourages active engagement with writing and feedback. Students become both providers and recipients of feedback, enhancing their analytical skills and critical thinking (Yu & Lee, 2016).

Real-world Simulation. Collaborative feedback simulates real-world scenarios where written communication is often a collaborative effort. Students develop skills needed for effective teamwork and communication (Yang, Badger & Yu, 2006).

Empowerment and Autonomy. Peer feedback empowers students to take charge of their learning. It provides them with a platform to assess their peers' work and apply their judgment, fostering a sense of autonomy (Liu, Edwards, 2018).

Challenges of Collaborative Feedback

Quality Control. Ensuring the quality and accuracy of peer feedback can be a challenge. Without proper guidance, peers might provide inaccurate or inadequate suggestions.

Cultural Sensitivity: Students from diverse cultural backgrounds may interpret feedback differently. Educators must address potential misinterpretations and promote a respectful feedback culture (Guasch, Espasa, 2015).

Balancing Positive and Constructive Feedback. Peers might struggle to strike a balance between positive feedback and constructive criticism. Ensuring that feedback is both encouraging and useful requires guidance (Colen et al., 2004).

Effective Practices for Implementing Collaborative Feedback

Clear Guidelines. Provide clear guidelines for peer review, outlining the specific aspects students should focus on, such as grammar, organization, and clarity.

Structured Feedback Forms. Use structured feedback forms to guide peers through the feedback process. This ensures that feedback is comprehensive and addresses key areas.

Training and Norming. Conduct training sessions to help students understand effective feedback practices. Norming sessions can align students' expectations regarding feedback quality (Gueldenzoph et al., 2002).

Rubrics and Criteria. Provide rubrics that define expectations for different aspects of writing. These rubrics serve as benchmarks for both providers and recipients of feedback.

Group Discussions. Incorporate group discussions where students discuss common feedback themes. This fosters a collaborative learning environment and helps students collectively address challenges.

Rotation and Pairing. Rotate peer groups regularly to expose students to diverse perspectives. Pair students of varying proficiency levels to ensure balanced feedback exchanges.

In short, Collaborative feedback strategies like peer review and group discussions offer a dynamic and student-centered approach to enhancing EFL writing skills. They nurture a culture of mutual support, engagement, and active learning. By balancing the benefits of diverse perspectives with the challenges of quality control and cultural sensitivity, educators can successfully integrate collaborative feedback into their EFL writing instruction. These strategies not only foster a holistic language expression experience but also equip students with essential communication skills for real-world contexts, emphasizing the social and collaborative nature of effective language use.

Types of Feedback in EFL Writing

In the intricate landscape of language learning, feedback emerges as a multifaceted tool that offers learners valuable insights into their progress and guides them towards improvement. Particularly in the realm of EFL writing, feedback takes on various forms and functions, each with its distinct advantages and considerations. The diverse types of feedback shape learners' writing development and contribute to the cultivation of their autonomy.

Traditionally, three types of feedback are widely identified in the literature: Teacher Feedback, Peer Feedback and Self-correction method. The advent of technology has introduced innovative avenues for delivering feedback, allowing for more immediate and comprehensive responses, namely, Automated Corrective Feedback (ACF) Tools. In this exploration of the types of feedback modalities in EFL writing, the focus will be on teacher feedback and ACF modalities because these are the types applied in the empirical study.

Teacher Feedback

Teacher feedback is a foundational aspect of effective EFL writing instruction. Educators, drawing on their expertise, offer personalized and contextually relevant guidance to enhance learners' writing skills. This approach goes beyond error correction, focusing on higher-order writing concerns such as coherence, organization, and communicative effectiveness (Leung et al., 2021). Teacher feedback encourages a dynamic exchange between educators and learners, fostering collaboration and shared responsibility for the writing process. By tailoring guidance to individual needs and developmental stages, educators contribute to the growth of comprehensive writing skills and the cultivation of a supportive learning environment (Tay & Lam, 2022).

Teacher feedback often follows a developmental approach that takes into account learners' current skill levels and progress over time (Lee, 2011). Educators consider learners'

previous work, identify recurring patterns of errors, and tailor their feedback to address specific linguistic and structural challenges (Kamberi, 2013). This approach not only supports immediate writing improvement but also contributes to learners' long-term language development. Through consistent feedback, learners gradually internalize linguistic rules and become more autonomous in recognizing and rectifying errors on their own.

One of the significant advantages of teacher feedback is its ability to boost learners' confidence and motivation. Constructive comments that acknowledge learners' efforts and highlight their strengths can enhance their self-esteem and willingness to take risks in writing (Lee, 2011). The interpersonal aspect of teacher feedback establishes a supportive learning environment, encouraging learners to engage with the writing process more deeply and actively (Kamberi, 2013). This nurturing atmosphere can help learners overcome writing anxiety and embrace challenges with a growth mindset.

Teacher feedback extends beyond surface-level errors to address higher-order writing skills. Educators evaluate content, argumentation, organization, and coherence, providing learners with a comprehensive understanding of their writing's strengths and areas for improvement (Kamberi, 2013). This holistic evaluation promotes the development of critical thinking and analytical skills, which are essential for producing well-structured and well-reasoned compositions (Lee, 2011).

In essence, teacher feedback is a multifaceted approach that offers targeted guidance, supports developmental growth, builds learners' confidence, and facilitates holistic writing skill enhancement. Its personalized and dialogic nature fosters a rich learning experience that goes beyond error correction to nurture learners' overall writing proficiency.

Pros and Cons of Teacher Feedback in EFL Writing.

Human teacher feedback in EFL writing is a widely practiced approach that offers several advantages but also presents certain challenges. Here, we delve into the pros and cons of human teacher feedback in EFL writing, drawing insights from various research studies.

Teacher feedback in the context of EFL writing brings numerous *advantages* that contribute to learners' development and improvement in writing skills. These pros highlight the unique benefits of human interaction and guidance in enhancing learners' written expression.

Personalized Guidance. Teacher feedback provides learners with individualized comments and suggestions that address their specific writing challenges and strengths. This personalized approach helps learners grasp areas that require improvement and encourages them to build on their existing skills (Hyland, 1990).

Constructive Feedback. Educators offer comprehensive and constructive feedback that goes beyond surface-level corrections. Teachers can delve into content, organization, and coherence, assisting learners in refining their writing quality and critical thinking abilities (Kamberi, 2013).

Motivation and Engagement. Positive and supportive interactions with teachers can significantly boost learners' motivation and engagement with writing tasks. Encouraging comments and guidance create a conducive environment for active participation in the writing process (Zheng & Yu, 2018).

Clarification and Dialogues. Learners can seek clarifications, further explanations, and engage in dialogues with teachers about their feedback. This interactive aspect promotes a deeper understanding of writing principles and encourages open communication (Hyland, 1990).

Holistic Development. Human feedback follows a developmental approach, focusing on learners' progression over time. Teachers track learners' growth, offer consistent guidance, and help them build a strong foundation in writing (Keh, 1990).

Higher-Order Thinking Skills. Through insightful comments, teachers encourage learners to think critically about their writing. This prompts learners to analyze their choices, make informed revisions, and elevate their writing to a more sophisticated level (Kamberi, 2013).

Cultivation of Writing Identity. Interactions with teachers help learners shape their writing identity and style. Encouragement and specific feedback empower learners to explore their unique voice and experiment with diverse writing strategies (Zheng & Yu, 2018).

Quality Improvement. Teacher feedback contributes to the overall improvement of writing quality by addressing issues related to grammar, vocabulary, syntax, and organization. The teacher's expert insights lead to refined and polished written outputs (Armağan et al., 2016).

In summary, teacher feedback in EFL writing offers personalized, constructive, and motivational benefits. It fosters a sense of guidance, encourages dialogue, and facilitates holistic development in learners' writing skills. These advantages underscore the vital role of human interaction in nurturing effective and proficient writers in the EFL context.

While human teacher feedback in EFL writing offers valuable advantages, it is essential to recognize that this approach also presents certain limitations and challenges. Understanding these cons helps educators and learners make informed decisions about incorporating teacher feedback into the writing process.

Time Constraints. Providing detailed and thoughtful feedback on each student's writing can be time-consuming for teachers. As a result, the amount of feedback may be

limited, impacting the depth of guidance and suggestions given to individual learners (Kamberi, 2013).

Subjectivity. Teacher feedback can be influenced by personal preferences and biases, leading to varying interpretations of writing quality. Learners might receive conflicting advice from different teachers, causing confusion and inconsistency (Hyland, 1990).

Dependence on Availability. Learners' access to feedback depends on teachers' availability and workload. If educators are not readily accessible or if classes have large numbers of students, learners might experience delays in receiving feedback (Armağan et al., 2016).

Lack of Autonomy. Overreliance on teacher feedback might hinder learners' development of autonomy and self-directed learning skills. Students might become overly dependent on external guidance rather than learning to identify and address their writing challenges (Zheng & Yu, 2018).

Limited Engagement with Revision. Learners might focus solely on addressing the highlighted errors or recommendations provided by teachers, missing opportunities to engage deeply with the revision process. This approach might hinder the development of critical revision skills (Hyland, 1990).

Reduced Opportunities for Peer Interaction. In a teacher-centered feedback approach, learners might have fewer chances to engage in peer interactions and collaborative writing activities, which can enrich their understanding of different perspectives (Armağan et al., 2016).

Pressure to Conform. Learners might feel pressured to conform to the teacher's expectations, potentially suppressing their creative expression or unique writing style. This can hinder the exploration of diverse writing approaches and voices (Kamberi, 2013).

Inadequate Follow-Up. In some cases, learners might not receive follow-up discussions or further explanations of feedback. This lack of dialogue might limit learners' ability to fully comprehend and internalize the feedback for future writing tasks (Zheng & Yu, 2018).

Emotional Impact. Learners' emotional responses to teacher feedback can vary. Harsh criticism or overly negative comments might discourage learners and affect their motivation to write. Balancing constructive feedback with positive reinforcement is essential (Armağan et al., 2016).

Resource Demands. Providing effective and comprehensive feedback requires teachers to possess in-depth knowledge of writing principles and pedagogical strategies. Continuous professional development is necessary to maintain high-quality feedback practices (Keh, 1990).

In conclusion, teacher feedback in EFL writing brings about various challenges, including time constraints, subjectivity, and potential impacts on autonomy. Recognizing these cons enables educators to find ways to address them and strike a balance between the benefits and limitations of this feedback approach.

Automated Corrective Feedback (introduction)

With the advent of technology, automated corrective feedback has gained prominence as an efficient and immediate means of providing feedback to learners. Automated systems utilize algorithms to identify linguistic errors, such as grammar and spelling mistakes, and offer corrective suggestions (Jensen et al., 2020). This approach allows learners to receive feedback promptly, enabling them to make quick revisions and engage in self-directed error correction (Buckingham Shum et al., 2023). Automated feedback tools also have the capacity to process large volumes of writing, making them particularly useful in contexts with a high number of learners (Jensen et al., 2020).

Conclusion

Feedback, in its essence, represents a dynamic interaction between learners and their language learning environment. It goes beyond being merely corrective; it serves as a dialogic process that informs learners about their strengths, addresses areas for improvement, and empowers them to take ownership of their linguistic progress. Through this dialogue, learners are not only guided towards linguistic accuracy but are also encouraged to refine their self-expression and critical thinking skills. The present chapter was devoted mainly to investigate the significance of feedback in EFL writing instructional context, its constructive impact on learners' writing proficiency, the students perceptions of feedback as a pedagogical component and how these perceptions influence its effectiveness on their writing improvement and autonomy. In addition to the instructional strategies used to effectively implement feedback and grasp its benefits. Understanding the nuances of feedback's role in EFL writing is imperative for educators and learners to construct pedagogical practices that promote meaningful learning and foster learner autonomy.

Chapter Three

Chapter three: Automated Error Corrective Feedback

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Chapter Three: Automated Error Corrective Feedback in EFL Writing

Section One: ACF in EFL Writing

As educators and researchers strive to optimize language learning experiences, the role of feedback, particularly in the context of writing skills development, has garnered significant attention (Zhang & Zou, 2022). In the digital age which transforms traditional educational paradigms, the integration of technology in education has paved the way for innovative approaches to enhancing learning outcomes. One of such dynamic areas of innovation is the utilization of "*Automated error corrective feedback*" (ACF) in the realm of EFL writing. Understanding the interplay between technology, feedback, and language acquisition becomes increasingly pivotal.

Automated error corrective feedback, a product of advancements in artificial intelligence and natural language processing, holds the promise of revolutionizing how learners receive guidance on their written work. This feedback mechanism leverages technological prowess to swiftly identify and address linguistic errors, ranging from grammatical inaccuracies to vocabulary choices, offering learners the opportunity to refine their writing with unprecedented accuracy and immediacy (Heift & Hegelheimer, 2017).

In this section, we will embark on a journey to uncover the potential of ACF as a catalyst for elevated EFL writing proficiency, while also acknowledging the challenges and ethical considerations that come with this technological advancement. In the following pages, through a systematic and blend investigation of theoretical underpinnings, empirical evidence, and practical implications, this study offers a well-rounded perspective on the integration of technology-driven feedback in the domain of language learning, its effectiveness in improving writing quality and autonomy, the strategies for its optimal integration in EFL writing instruction, students' perceptions, and deep comparative analysis between automated and teacher feedback.

Technology Integration in EFL Learning

Definition of ICTs

Many scholars have defined ICTs in various ways. Anderson (2010) described ICTs as a plural term referring to the use of all the technologies that facilitate the communication process. ICTs are basically information processing tools and a diverse set of applications and services that are used to generate, store, process, record, disseminate, and exchange information. In the same vein, Tinio (2003) stated that information and communication technology is a "diverse set of technological tools and resources used to communicate and to create, disseminate, store, and manage information" (p. 4). According to Davies and Hewer's (2008), ICTs have been integrated into language teaching and learning since the 1980s, initially with the aim of enhancing the effectiveness of the educational process. Undoubtedly, the incorporation of ICTs into the contemporary EFL classroom can offer benefits to learners.

Computer-Assisted Language Learning (CALL)

In the 1960s, Computer-Assisted Language Learning (CALL) was introduced. It places significant emphasis on learner-centeredness in language learning via enabling learners to take charge of their own learning. It plays a crucial role by aiding teachers in facilitating the language learning process. CALL can serve as a means to reinforce classroom-acquired knowledge. Additionally, it can function as a remedial tool to assist learners who have limited language proficiency. CALL is characterized by two vital aspects: personalized learning and interactive learning. Its primary focus is on learning rather than teaching, making it effective in promoting self-directed learning. Typically, CALL is considered a subset of information and communication technologies (ICTs).

Common Components of ICTs Used in the Educational Field

In the educational field, schools and universities make use of a wide range of ICT tools. Computers, the internet, and applications are the most common ones.

Computers

A computer is a universal information processor that is widely used in the education sector. It can be described as "a programmable electronic device that can store, retrieve, and process data" (Merriam-Webster, n.d.). It helps students find useful sources for their projects, assignments and research.

Internet

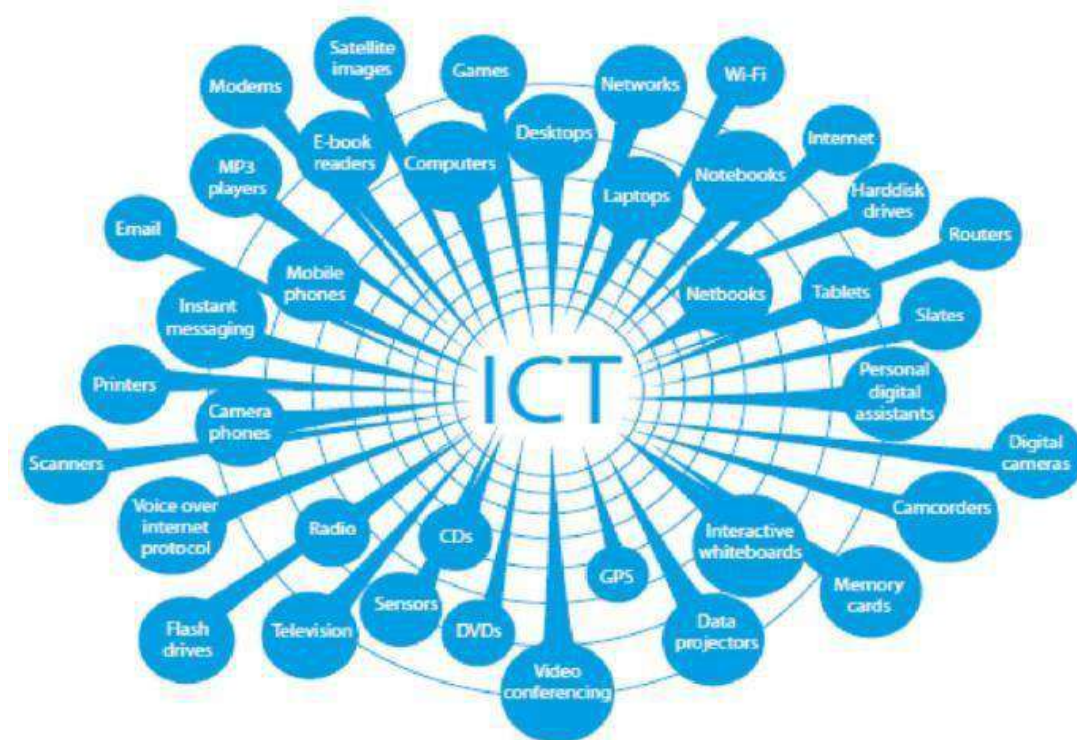
According to Dictionary.com, Internet is "a vast computer network linking smaller computer networks worldwide. The internet includes commercial, educational, governmental, and other networks, all of which use the same set of communications protocols". It is a crucial tool that assists us in all areas, particularly education. It plays a major role in the realm of teaching and learning. The internet is the world's largest library. It is a library that you can access it from your workplace, your home, your place of study, and maybe your local library with just a few mouse or keyboard clicks, a library that is found everywhere, and open all hours (Duggleby, 2001).

Applications

Each computer or smartphone contains some applications. According to Gillis (2021), applications are software programs designed by professional programmers in order to help users perform particular tasks. Many applications have been adopted in EFL classrooms to improve the efficiency and effectiveness of education at all levels (Meenakshi, 2013) including Duolingo, Edmodo, Quillbot, WordTune, and Grammarly.

Figure 5

Different ICT Tools. (Anderson, 2010, p. 4)



Automated Error Corrective Feedback (ACF)

Automated error corrective feedback refers to the utilization of technological tools, often powered by artificial intelligence and natural language processing algorithms, to analyze and rectify linguistic errors present in learners' written compositions and provide them with instantaneous and targeted guidance on these errors (Ferris & Roberts, 2001; Nesi & Gardner, 2012). This innovative approach stands at the intersection of language learning and technology, aiming to address and enhance the accuracy, coherence, and overall quality of written texts produced by EFL learners.

In its essence, automated error corrective feedback serves as a real-time mechanism that identifies a diverse range of errors, encompassing grammatical, syntactical, vocabulary-related, and even stylistic inconsistencies (Shintani, 2016; Li, 2017). By analyzing the content of learners' written pieces, these automated systems pinpoint deviations from standard language

usage, drawing upon vast linguistic databases to offer corrective suggestions and improvements (Chen et al., 2020).

How do ACF Systems Identify Errors?

Technology-driven systems, particularly automated error correction tools, employ a variety of sophisticated techniques to identify and address writing errors in a precise and efficient manner. These systems harness the power of artificial intelligence (AI) and natural language processing (NLP) to analyze written text comprehensively (Elola & Oskoz, 2016).

They start by *parsing the text*, breaking it down into its constituent elements, such as words, phrases, sentences, and paragraphs. Then, an initial analysis of the text is performed to identify potential errors, ranging from grammatical and spelling mistakes to more complex issues like syntax or coherence (Karat, 1999).

Automated error corrective feedback systems often employ a rule-based or statistical approach, or even a combination of both, to identify errors and provide suggestions for correction (Levy & Stockwell, 2006; Xia & Li, 2019). To identify *grammatical errors*, these systems utilize a vast *database* of grammar rules and linguistic patterns. They compare the text against these rules to pinpoint deviations. Syntax analysis involves examining the structure of sentences and their components, including subjects, verbs, objects, and modifiers. Errors in sentence structure are flagged for correction (Gaskell & Cobb, 2004).

Furthermore, automated systems have extensive *dictionaries* and word lists that they use to check for *spelling errors*. If a word is not found in the dictionary or if there is a mismatch between the word and its context, it is flagged as a potential spelling error. *Vocabulary* checks also include identifying overused words, redundancy, or inappropriate word choices based on context (AbuSeileek & Abualsha'r, 2014).

Contextual analysis is a crucial aspect of error detection. These systems consider the surrounding words and phrases to determine whether a word or phrase is used correctly within

a specific context. For instance, the system can differentiate between homophones (words that sound the same but have different meanings) like "there" and "their" based on the context in which they appear.

Some automated systems offer suggestions for improving writing *style*, including recommendations for more concise or formal language. Punctuation checks ensure that punctuation marks, such as commas, periods, and quotation marks, are used correctly (Hojeij & Hurley, 2017).

Once the system identifies errors or potential areas for improvement, it *generates feedback* for the learner. This feedback typically includes the identified error, a suggested correction, and an explanation of the rule or principle behind the correction. In some cases, feedback may be accompanied by examples or alternative phrasings to help learners better understand and apply the corrections (Elola & Oskoz, 2016).

Many automated error correction systems allow learners to interact with feedback. Learners can accept or reject suggested corrections, providing a degree of control and autonomy in the revision process. Some systems also track learners' interactions, enabling them to monitor their progress and identify persistent issues for further improvement (Elola & Oskoz, 2016).

Advanced systems may employ *machine learning algorithms* to improve their error detection capabilities over time. They adapt to learners' writing patterns and the errors they commonly make, offering increasingly customized feedback (Barrot, 2023).

In summary, technology-driven systems, for identifying and addressing writing errors, rely on a combination of linguistic rules, contextual analysis, and vast databases to provide learners with accurate and timely feedback. These systems offer a comprehensive approach to error correction, helping learners refine their writing skills and gradually internalize correct language usage. Some advanced systems harness machine learning techniques, adapting and

improving their error detection capabilities over time based on accumulated data and become more sophisticated and integral to the language learning process (Rezvani et al., 2021).

Characteristics of Automated Error Corrective Feedback

Automated error correction is a pivotal component of modern language education that utilizes technology, particularly artificial intelligence (AI) and natural language processing (NLP), to identify and rectify linguistic errors in written language (Hoang, 2019). ACF represents a departure from traditional methods of language assessment and feedback provision. Rather than relying solely on human evaluators, these systems offer learners immediate, consistent, and rule-based feedback on their written compositions. The followings are the main characteristics of this innovative approach that has reshaped the dynamics of language learning:

Immediate Feedback

One of the most significant characteristics of automated error correction is its ability to provide learners with instantaneous feedback. Unlike traditional feedback methods that require learners to wait for a teacher or peer to review their work, automated systems offer real-time evaluations. Learners can receive feedback as soon as they complete a writing task, enabling them to make immediate corrections while the content is fresh in their mind (Guo et al., 2022).

Targeted Error Identification

Automated error correction systems are designed to detect a wide range of linguistic errors, including grammatical mistakes, spelling errors, vocabulary issues, and even stylistic inconsistencies. These systems analyze the entire text and pinpoint deviations from standard language usage. This targeted error identification helps learners understand their specific language weaknesses and provides guidance for improvement (Sanosi, 2022).

Consistency

Automated systems consistently apply predefined linguistic rules and patterns when identifying errors. This consistency ensures that all learners receive standardized feedback, reducing the potential for variability that can occur with human evaluators. It also means that learners are exposed to a consistent model of correct language usage (Woodworth & Barkaoui, 2020).

Encouragement of Revision

Automated error correction encourages a culture of revision and self-improvement. Learners receive feedback that highlights their mistakes and offers suggested corrections. This process empowers learners to actively engage in revising their work, applying corrections, and internalizing the correct language patterns. Over time, this practice contributes to ongoing language development (Shadiev & Feng, 2023).

Privacy and Independence

Automated error correction respects learners' privacy, as they can work on their writing independently without the need for direct human oversight. This autonomy fosters a sense of responsibility for one's own learning and encourages learners to take initiative in seeking improvement (Heift & Hegelheimer, 2017).

Time Efficiency

For educators, automated error correction can significantly reduce the time and effort required to provide feedback on written assignments. This efficiency allows teachers to allocate more time to addressing higher-level writing concerns, such as content development and organization, during class or one-on-one interactions with learners (Hoang, 2022).

Scalability

Automated error correction can be applied to a large number of assignments simultaneously, making it particularly useful in contexts with a high volume of written work

to assess. This scalability ensures that learners consistently receive feedback, even in large classes or online learning environments (Barrot, 2023).

Adaptive Learning

Some advanced automated systems employ machine learning techniques, adapting and improving their error detection capabilities over time based on accumulated data. This adaptability enhances the effectiveness of error correction by customizing feedback to individual learner needs (Tan et al., 2022).

In conclusion, automated error correction is a transformative tool in language education that leverages technology to provide immediate, targeted, and consistent feedback to learners. Its characteristics include facilitating revision, privacy and autonomy, timeliness, and scalability offer help for learners and educators. As technology continues to evolve, automated error correction is likely to play an increasingly prominent role in supporting language learners on their journey toward proficiency and fluency.

Effectiveness of Automated Corrective Feedback

In the ever-evolving landscape of English as a Foreign Language (EFL) education, the role of technology has become increasingly prominent. One of the notable advancement is the integration of ACF systems into the realm of language learning. These systems have gained attention for their potential to enhance writing instruction and contribute to language proficiency development. This section delves into an exploration of the effectiveness of automated error corrective feedback, aiming to shed light on the impact it has on EFL learners' writing skills, autonomy, and overall language acquisition.

This examination seeks to uncover the multifaceted dimensions of automated error corrective feedback, analyzing its effectiveness from various angles. We will explore the extent to which automated feedback improves writing accuracy and quality, examine its influence on learner autonomy and engagement, and assess its implications for the broader

landscape of EFL education. Ultimately, this section seeks to answer critical questions about the effectiveness of automated error corrective feedback and its role in shaping the future of EFL education.

Linguistic Areas of Improvements

The integration of ACF into English as a Foreign Language (EFL) writing instruction has demonstrated significant and multifaceted improvements in various aspects of writing. They hold the promise of addressing common linguistic errors, fostering self-editing skills, and accelerating the learning process (Rummel & Bitchener, 2015). Here, we delve into a comprehensive analysis of these enhancements in accuracy, grammar, vocabulary, and overall writing quality:

Accuracy and Error Reduction:

- Automated error corrective feedback has consistently proven effective in improving the accuracy of EFL learners' writing. This is particularly evident in the reduction of grammatical errors, spelling mistakes, and punctuation errors.
- The instant and consistent nature of automated feedback ensures that learners are promptly made aware of their errors, allowing for immediate correction.
- Consistent exposure to error correction reinforces learners' understanding of correct usage, resulting in fewer recurring mistakes over time (Rummel & Bitchener, 2015).

Grammar Proficiency

- Automated feedback systems excel in addressing grammatical errors, such as subject-verb agreement, verb tense consistency, and sentence structure.
- Learners who receive automated feedback often exhibit a heightened awareness of grammatical rules and a more accurate application of these rules in their writing.
- The cumulative effect of grammar-focused feedback contributes to improved grammatical proficiency and a more polished writing style (Parra & Calero, 2019).

Enriched Vocabulary

- Automated feedback also plays a role in expanding learners' vocabulary. Feedback often includes suggestions for word choice, synonyms, and vocabulary enrichment.
- Exposure to varied vocabulary alternatives enhances learners' lexical diversity and the overall quality of their writing.
- Learners tend to incorporate new vocabulary into their subsequent compositions, resulting in more sophisticated and expressive language use (Wilson & Andrada, 2016).

Writing Quality and Coherence

- Beyond error correction, automated feedback addresses overall writing quality, coherence, and organization.
- Feedback prompts learners to reconsider sentence structures, paragraph transitions, and logical flow within their compositions (Wilson & Andrada, 2016).
- As a result, learners produce more cohesive and well-structured essays, contributing to an overall improvement in writing quality.

Enhanced Self-Editing Skills

- The active engagement required for implementing automated feedback fosters learners' self-editing skills (Wilson et al., 2014).
- Learners become more adept at critically assessing their own writing, identifying errors, and making necessary revisions independently.
- This development of self-editing skills extends beyond the immediate feedback process, benefiting learners' long-term writing capabilities (Wilson et al., 2014).

Improved Writing Proficiency

- Cumulatively, the improvements in accuracy, grammar, vocabulary, and overall writing quality lead to enhanced writing proficiency.

- EFL learners who regularly receive automated feedback exhibit greater competence in producing well-crafted and error-free compositions.
- This proficiency extends to various writing genres, further enriching learners' language skills (Warschauer & Grimes, 2008).

In conclusion, the analysis demonstrates that automated error corrective feedback has a substantial and positive impact on EFL learners' writing abilities. The improvements encompass accuracy, grammar proficiency, enriched vocabulary, enhanced writing quality, self-editing skills, and overall writing proficiency. By addressing multiple facets of writing, automated feedback systems contribute significantly to the holistic development of learners' language skills and writing competence.

Factors Influencing the Effectiveness of Automated Feedback

The effectiveness of ACF in writing instruction is influenced by a multitude of factors, among which learner motivation and engagement play pivotal roles (Zhang & Hyland, 2018). Understanding these factors is crucial in harnessing the full potential of automated feedback systems.

Learner Motivation

Learner motivation is a cornerstone of effective feedback utilization. When learners possess intrinsic motivation, driven by personal interest and a genuine desire to improve their writing, they are more likely to engage meaningfully with the feedback provided. In such cases, feedback serves as a valuable resource for self-improvement, aligning with the learners' own aspirations (Adeshola & Agoyi, 2022)

However, motivation isn't solely intrinsic. Extrinsic factors, such as the promise of improved grades or external rewards, can also drive engagement with feedback. While extrinsic motivation can be effective in prompting learners to interact with feedback, it may not always result in the same depth of improvement or long-term commitment to the writing

process. Therefore, educators must consider how to foster both intrinsic and extrinsic motivation in learners to maximize the impact of automated feedback.

Feedback Relevance and Clarity

The perceived relevance and clarity of automated feedback are fundamental factors influencing learner engagement. Feedback that directly addresses learners' specific needs and aligns with their writing objectives is more likely to be viewed as valuable and, consequently, more engaging. When learners see feedback as pertinent to their individual goals, they are motivated to act on it (Adeshola & Agoyi, 2022).

Moreover, feedback must be presented in a clear and comprehensible manner. Ambiguous or overly technical feedback can discourage learners from actively engaging with it. Clarity in feedback not only facilitates its understanding but also empowers learners to take control of the revision process confidently.

Timeliness of Feedback

Timeliness is another critical factor affecting the effectiveness of automated feedback. Automated systems offer the significant advantage of providing immediate feedback, allowing learners to address errors while the writing task is still fresh in their minds. This prompt feedback-loop enhances learner engagement and reinforces the connection between the initial writing effort and the feedback-driven improvement.

On the contrary, delayed feedback may reduce its impact. When learners receive feedback long after the writing task, they may lose the context and motivation to revise their work thoroughly. Ensuring timely feedback delivery is thus essential in maintaining learner engagement throughout the writing process (Mao & Lee, 2023).

Customization and Adaptation

The level of customization and adaptation offered by automated feedback systems can profoundly affect learner engagement. Systems that allow learners to tailor feedback

preferences or focus on specific writing aspects provide a more personalized feedback experience. Learners are more likely to engage with feedback that aligns with their unique needs and objectives.

Additionally, systems that adapt to individual learner writing patterns and errors offer feedback that is highly relevant and motivating. Learners appreciate feedback that not only points out mistakes but also provides guidance on how to rectify them. This adaptability promotes a sense of ownership over the revision process, fostering greater learner engagement (Mao & Lee, 2023).

In conclusion, the effectiveness of automated error corrective feedback hinges on a complex interplay of factors, with learner motivation and engagement at the forefront. These factors, encompassing motivation source, feedback relevance, timeliness, customization, and adaptation, collectively shape the impact of automated feedback on EFL learners' writing improvement. Recognizing and addressing these factors in the design and implementation of automated feedback systems can enhance their effectiveness and promote active learner engagement in the feedback process.

ACF Integration in EFL Writing Instructional Context

Importance of Integrating ACF in EFL Writing Instruction

The acquisition of proficient writing skills in English as a Foreign Language (EFL) is a fundamental goal for learners worldwide, as it opens doors to academic, professional, and personal opportunities in an increasingly interconnected world. Within the landscape of EFL writing instruction, the role of feedback has been instrumental in guiding learners towards linguistic competence and effective communication. In this context, the emergence of automated error corrective feedback represents a transformative and contemporary advancement that has reshaped the dynamics of EFL writing instruction (Shang, 2022).

In recent years, the adoption of technology-driven solutions in education has been accelerated by the increasing accessibility of digital tools and platforms. Automated error corrective feedback has emerged as a potent tool to enhance EFL writing skills, offering a unique synergy between human instruction and machine-driven assistance. This integration aims to create a holistic and responsive learning environment that empowers learners to take charge of their writing improvement journey while benefiting from the expertise of automated systems (Heift & Hegelheimer, 2017).

Additionally, the integration of automated feedback into EFL writing instruction has transformed the way learners receive guidance and support in their writing endeavors. This integration involves incorporating technology-driven systems and tools into the teaching and learning process to enhance the overall quality of EFL writing instruction (Han & Sari, 2022).

Furthermore, incorporating automated error corrective feedback into EFL writing instruction underscores the transformative potential of technology in language education. By empowering learners to actively engage with their own written work and immediately implement corrective measures, this approach not only facilitates language improvement but also contributes to the development of learner autonomy, an essential attribute in language learning (White, 1995; Wang & Li, 2021).

The integration of automated error corrective feedback in writing instruction addresses the temporal gap between writing production and feedback reception, enabling learners to make prompt revisions and internalize corrections as they work to refine their language skills (Ferris & Hedgcock, 2005). Moreover, the technology's ability to identify and rectify a wide array of errors mirrors the continuous cycle of learning, fostering a sense of progress and development among learners as they observe their writing gradually aligning with linguistic norms (Vigil, 2018).

The introduction of automated error corrective feedback into EFL writing pedagogy raises pivotal questions and promises unparalleled advantages. How does this technology enhance writing proficiency, accuracy, and overall language expression? What are the implications of automated feedback for learner autonomy and active engagement in the writing process? How does it compare to traditional teacher feedback, and what are its strengths and limitations in the realm of language learning?

This exploration of ACF in EFL writing endeavors to address these questions and sheds light on the multifaceted dimensions of this innovative approach. Through a comprehensive analysis, this study seeks to uncover the role of automated feedback as a catalyst for elevated writing proficiency and learner autonomy. By examining its impact, effectiveness, and user perceptions, we aim to provide educators, researchers, and learners with valuable insights into the potential of technology-driven feedback to revolutionize EFL writing instruction and empower learners in their pursuit of language mastery.

Procedure of ACF Integration into EFL Writing Instruction

The first step in integrating automated feedback is *selecting* the most suitable tools or software. Educators choose from a range of available platforms that offer automated error correction and writing analysis capabilities, aligning with the specific goals and needs of the learners (Chen, Cheng et al., 2008).

Automated feedback tools are *seamlessly* integrated into writing assignments as a standard component. Learners are instructed to use the selected tool while composing their written work, ensuring that technology becomes an integral part of the writing process (Tang & Rich, 2017).

Educators play a crucial role in preparing learners to use automated feedback effectively. They provide guidance on using the software, understanding the feedback provided, and incorporating suggested corrections into their writing (Tang & Rich, 2017).

Real-time feedback is a key benefit of automated systems. Learners receive immediate feedback as they write, with the system identifying errors and offering suggestions. This allows learners to make corrections and improvements on the spot.

The integration of automated feedback encourages learners to develop self-editing skills. By reviewing and acting on the feedback provided by the tool, learners become more proficient at identifying and addressing their writing errors independently (Stevenson & Phakiti, 2019).

Automated feedback systems often allow for customization based on the learners' proficiency levels and specific writing goals. This flexibility tailors the software settings to provide appropriate guidance and challenges for individual learners (Stevenson & Phakiti, 2019).

While automated feedback is valuable, it is often used alongside human feedback. Educators continue to provide expertise and insights, addressing higher-level writing concerns such as content, organization, and style. The combination of automated and human feedback offers a holistic approach to instruction (Stevenson & Phakiti, 2019).

Educators and learners can use the data generated by automated feedback systems to track progress over time. This includes monitoring error patterns and improvement trends, allowing learners to set goals for language enhancement (Choi & Lee, 2010).

Automated feedback promotes a culture of revision and refinement. Learners are encouraged to revisit and revise their written work based on the feedback received. This iterative process contributes to ongoing language development (Choi & Lee, 2010).

Educators may use automated feedback as part of the assessment process. It can be used to evaluate learners' writing proficiency and identify areas where additional instruction or support is needed (Choi & Lee, 2010).

In conclusion, when carefully integrated and balanced with human feedback, automated systems contribute significantly to the achievement of writing proficiency goals in EFL education.

Strategies of ACF Integration in EFL Writing Instruction

ACF integration into EFL writing instruction involves a range of strategies that represent a transformative step in the evolution of language learning and teaching and encompass various facets, from the selection of appropriate automated programs to the design of feedback delivery mechanisms that align with pedagogical goals. It also considers the role of educators in providing guidance and context to learners regarding the feedback received, thus bridging the gap between technology and pedagogy (Stevenson & Phakiti, 2014).

This section delves into the *dynamic* world of ACF integration in education. It aims to explore these strategies that underpin their integration and how they are applied within the realm of EFL writing instruction. It delves into the considerations and decision-making processes involved in implementing these strategies, offering insights for educators, curriculum designers, and researchers seeking to optimize the use of technology in EFL writing instruction. Additionally, it addresses the potential challenges and ethical considerations that arise in this context, providing a comprehensive perspective on ACF integration strategies within EFL learning environments and their far-reaching implications for learners and educators. Here, we discuss the various strategies that underline the effective integrating of ACF into EFL writing instruction.

Tool Selection and Integration

One of the fundamental strategies is the careful selection and integration of automated error correction tools. Educators must identify tools that align with the specific needs and goals of their EFL learners. These tools often come in the form of dedicated software or platforms designed to analyze written content and provide feedback on grammatical, lexical,

and structural errors. Integrating these tools into the curriculum ensures that learners have access to immediate and consistent feedback during the writing process (Zhang, 2020).

Targeted Error Analysis

Automated systems can be customized to focus on specific types of errors commonly made by EFL learners. By identifying and prioritizing error categories such as verb tense inconsistencies, article usage, or sentence structure, educators can tailor feedback to address the most pressing issues (Yoon, Polio, 2017). This targeted approach allows learners to concentrate on areas that require improvement, leading to more effective error correction.

Feedback Delivery Mechanisms

Designing effective feedback delivery mechanisms is crucial. Learners can receive feedback in various formats, including annotated documents, error highlights within the text, or summary reports. The choice of delivery method should consider learner preferences and the educational objectives of the writing task. The goal is to ensure that feedback is accessible, comprehensible, and conducive to the revision process (Yoon, Polio, 2017).

Progressive Complexity

An effective strategy involves progressively increasing the complexity of writing tasks in tandem with the integration of automated error correction. As learners advance, the writing tasks can become more challenging, encompassing various genres and styles. Automated feedback should evolve accordingly, addressing not only basic errors but also higher-order concerns such as argumentation, coherence, and genre-specific conventions (Stevenson & Phakiti, 2014).

Guided Self-Editing

Automated error correction can empower learners to become self-editors. Encouraging learners to actively engage with feedback and apply it to their revisions promotes self-directed learning and autonomy. This strategy cultivates essential skills for lifelong writing

improvement, as learners take on a more proactive role in refining their writing (Thi & Nikolov, 2022).

Teacher-Mediated Feedback

While automated systems offer valuable insights, teacher-mediated feedback remains essential. Educators can provide context, explanations, and additional guidance that automated systems may not capture. Combining automated error correction with teacher expertise creates a balanced approach, ensuring that learners receive comprehensive and well-rounded feedback (Thi & Nikolov, 2022).

Ethical Considerations

Ethical considerations are integral to the integration of automated error correction. Educators must address questions of plagiarism, authenticity, and the ethical use of technology. Strategies for ensuring academic integrity and responsible technology use should be part of the instructional framework.

In conclusion, the integration of automated error correction into EFL writing tasks involves a multifaceted approach that encompasses tool selection, targeted error analysis, feedback delivery mechanisms, progressive complexity, guided self-editing, teacher-mediated feedback, and ethical considerations. These strategies collectively contribute to the creation of a dynamic and effective learning environment that fosters writing proficiency and learner autonomy. By thoughtfully implementing these strategies, educators can harness the power of technology to empower EFL learners on their writing improvement journey.

Prompts and Tasks that Encourage Interaction with ACF

Designing prompts and tasks that encourage interaction with automated feedback is a critical aspect of integrating technology-driven error correction into EFL writing instruction. These prompts and tasks should be carefully crafted to foster active engagement with the feedback provided by automated systems while aligning with pedagogical goals.

Scaffolded Writing Prompts

One effective strategy involves scaffolding writing prompts to guide learners toward specific areas where automated feedback can be most beneficial. For instance, prompts may ask learners to focus on using specific grammatical structures, vocabulary, or style elements. By providing clear instructions and directing learners' attention to these aspects, educators encourage them to seek feedback in these specific areas, facilitating targeted improvement (Xu, Zhang, 2022).

Revision-Based Tasks

Tasks that emphasize the revision process create natural opportunities for interaction with automated feedback. Learners can be tasked with revising and resubmitting their work after receiving automated feedback. This iterative approach allows them to apply the feedback received and observe the changes in subsequent drafts, reinforcing the connection between feedback and improvement (Xu, Zhang, 2022).

Peer Review with Automated Feedback Integration

Integrating peer review activities with automated feedback can be a valuable strategy. Learners can review their peers' writing, identify potential errors, and compare their observations with the feedback generated by automated systems. This collaborative approach not only enhances engagement but also promotes peer learning and critical analysis of writing (Wilson, Czik, 2016).

Reflective Writing Tasks

Designing reflective writing tasks encourages learners to internalize the feedback they receive. For example, learners can be asked to write reflections on the feedback they received, highlighting the errors they found most challenging to correct and their strategies for improvement. This meta-cognitive process deepens their understanding of feedback and promotes self-regulated learning (Wilson, Czik, 2016).

Genre-Specific Writing Projects

Genre-specific writing projects provide context for interaction with automated feedback. Learners can work on tasks that mimic real-world writing situations, such as composing emails, reports, or essays in specific genres. Automated feedback can then be tailored to assess adherence to genre-specific conventions, ensuring that learners engage with feedback in a genre-appropriate manner (Zhai, Ma, 2022).

Error Analysis Exercises

Implementing error analysis exercises can be an effective strategy. Learners can be given sentences or passages with identified errors and tasked with analyzing the feedback provided by automated systems. This approach encourages learners to critically assess the feedback, understand their mistakes, and make necessary corrections (Zhai, Ma, 2022).

Goal-Oriented Writing

Encouraging goal-oriented writing tasks motivates learners to seek feedback with a specific purpose in mind. For example, learners can set goals to reduce the frequency of a particular error type in their next writing assignment. This goal-driven approach promotes active engagement with feedback as learners work toward achieving their writing objectives (Zhai, Ma, 2022).

Continuous Improvement Portfolios

Creating continuous improvement portfolios allows learners to track their progress over time. Learners can compile their writing samples, feedback, and revisions in a portfolio format. Periodic reflections on their growth and the role of feedback in their improvement reinforce the value of interaction with automated error correction.

In summary, designing prompts and tasks that encourage interaction with automated feedback involves a thoughtful and pedagogically informed approach. These tasks should be designed to empower learners to actively engage with feedback, apply it to their writing, and

develop the self-editing skills necessary for ongoing improvement. By incorporating these tasks into EFL writing instruction, educators can harness the full potential of technology-driven feedback systems to enhance learners' writing proficiency and autonomy.

Automated Error Corrective Feedback and Learner Autonomy

In the realm of language learning and writing instruction, the concept of learner autonomy has gained prominence as educators seek to empower students to take charge of their learning journey. In the ever-evolving landscape of education, the interplay between automation and learner autonomy has become a pivotal consideration. Balancing these two aspects is a crucial endeavor, particularly in the field of language learning and education. On one hand, automation, fueled by advancements in technology, offers unprecedented opportunities for personalized learning experiences and efficient resource utilization. On the other hand, learner autonomy empowers individuals to take ownership of their education, fostering independence and critical thinking skills. In this context, automated feedback systems play a pivotal role in nurturing and enhancing different aspects of learner autonomy, particularly in the domain of writing.

Effect of ACF on Learner Autonomy Improvement

This section delves into the intricate relationship between feedback automation and learner autonomy, exploring the challenges, benefits, and strategies for achieving a harmonious equilibrium between the two in contemporary educational contexts as follows:

Self-direction, Self-assessment, and Goal Setting

ACF guide learners to become more self-directed writers. By providing timely and personalized feedback, ACF systems can support learners in developing their writing skills and fostering self-directed learning behaviors. Research in this area highlights the various ways in which ACF contributes to the development of self-directed writing. Automated feedback allows learners to engage in self-assessment. They can compare their work against

predefined criteria and set personal goals for improvement. This process of self-reflection and goal setting encourages autonomy by making learners active participants in their own learning (Zhang & Hyland, 2018).

Self-awareness and Meta-cognitive Skills

Additionally, ACF enhances learners' self-awareness and meta-cognitive skills. When learners receive feedback from ACF systems, they gain insights into their writing strengths and weaknesses (Wang et al., 2019). This feedback prompts learners to reflect on their writing process, identify areas for improvement, and set goals for future writing tasks. Through this meta-cognitive engagement, learners become more self-aware of their writing abilities and develop a better understanding of their learning needs.

Learning Responsibility and Self-Regulating

Automated feedback encourages learners to take ownership of their writing process. When students receive feedback promptly, they can independently address issues and iterate on their work. This sense of responsibility and agency contributes to the development of learner autonomy (Zhang, 2017). Also, ACF supports learners in self-regulating their writing process. Self-regulated writers actively monitor and control their writing behaviors, making strategic decisions to improve their writing quality (Panadero & Broadbent, 2017). ACF provides learners with specific feedback on aspects such as organization, grammar, and coherence, which helps them identify areas requiring revision or refinement. By using this feedback, learners can self-adjust their writing strategies, apply revisions, and independently evaluate the effectiveness of their changes (Wilson & Roscoe, 2019).

Customization and Personalization

Furthermore, ACF promotes learner autonomy by offering individualized feedback. Traditional feedback methods often have limitations in terms of time and resources, making it

challenging to provide individualized feedback to every learner. However, ACF systems can generate personalized feedback tailored to each learner's specific needs (Graham, 2017). This personalized approach empowers learners to take ownership of their writing, as they receive feedback that directly addresses their unique strengths and weaknesses. Learners can then use this personalized feedback to make informed decisions about their writing improvements, fostering their autonomy as writers. Many automated feedback systems offer customization options. Learners can tailor feedback preferences to align with their specific needs and learning goals. This personalization not only promotes autonomy but also ensures that feedback is relevant and meaningful to each student (Zhang & Hyland, 2018).

Immediate, Ongoing and Active Engagements

Additionally, the immediate, accessible and ongoing feedback enables learners to engage in timely revisions and iterations. This instant feedback loop empowers students to identify their mistakes and areas for improvement without relying solely on teachers. Learners can review their work, understand errors, and make necessary revisions autonomously (Koltovskaia, 2020). Furthermore, such immediacy allows learners to promptly address areas requiring improvement and make revisions while the writing task is still fresh in their minds. This iterative process of receiving feedback, revising, and receiving further feedback enables learners to actively engage with their writing and continuously refine their work. Additionally, learners can access feedback 24/7, reducing their dependency on teachers' schedules. This convenience empowers students to take control of when and how they engage with their writing practice (Wilson & Roscoe, 2019).

Resource for Self-study

Automated feedback systems often provide resources for additional self-study. Learners can access explanations, examples, and supplementary materials to deepen their

understanding of language and writing concepts. This self-directed exploration is a hallmark of learner autonomy (Zhang, 2017).

Progress Tracking

Many automated systems track learners' progress over time, allowing students to monitor their development. The ability to observe improvement can be motivating and instill a sense of achievement, further fostering learner autonomy as students become more engaged in their learning journey (Yannakoudakis, 2018).

Risk-Taking and Experimentation

Knowing that automated feedback is available, learners may be more willing to take risks in their writing and experiment with new language structures or vocabulary. They can do so with the confidence that they will receive feedback, helping them refine their skills independently (Yannakoudakis, 2018).

In conclusion, ACF systems have the potential to significantly enhance learner autonomy in the writing process. They play a vital role in guiding learners to become more self-directed and self-assessment writers. ACF tools also enhance self-awareness, support learning responsibility and promote self-regulation in learners. ACF systems empower learners to take ownership of their writing process.

As technology continues to advance, educators and designers should embrace these tools as allies in nurturing the autonomy and self-directed learning skills of their students and developing their writing skills, ultimately equipping them for success in the ever-changing landscape of education and beyond.

Perceptions of Automated Error Corrective Feedback

In an era characterized by the integration of technology into education, automated error corrective feedback has emerged as a powerful tool for enhancing writing skills. However, the success of these tools hinges not only on their technical capabilities but also on how they are

received and embraced by those who use them. Learners' and educators' *perceptions* play a pivotal role in determining the extent to which automated feedback is integrated into instructional practices (Heift & Hegelheimer, 2017).

Perceptions of automated error corrective feedback in EFL writing instruction are central to understanding how learners and educators interact with and respond to technology-driven feedback systems (Sinha, & Nassaji, 2022). Understanding perceptions is a complex endeavor because they encompass a range of attitudes, beliefs, and opinions that influence the acceptance, utilization, and overall effectiveness of automated feedback tools. It involves exploring how learners view the utility of automated feedback in improving their writing, the extent to which educators trust and integrate automated systems into their pedagogy, and the broader implications for learner autonomy and motivation (Alsallami, 2017). Additionally, examining how perceptions may vary across different cultural, linguistic, and educational contexts provides valuable insights into the global applicability of automated feedback solutions.

This section aims to delve into the diverse dimensions of perceptions related to automated error corrective feedback. It will explore the factors that shape these perceptions, such as prior experiences, cultural influences, and technology readiness. Moreover, it will consider how these perceptions can be harnessed to enhance the acceptance and effectiveness of automated feedback systems. By examining perceptions from multiple angles, this exploration contributes to the broader discourse on the role of technology in language education and offers insights into how educators and designers can tailor their approaches to meet the needs and expectations of diverse learners in EFL contexts.

EFL Learners' Positive Perceptions of ACF

EFL learners perceive automated feedback as a valuable learning tool and they exhibit positive attitudes toward it. They appreciate the immediate and objective nature of the

feedback provided by automated systems (Huang, 2018), they find it helpful to receive instant feedback on their language performance, which allows them to identify and correct errors more efficiently (Wang, 2019).

Many EFL learners believe ACF supports their language development by providing consistent and objective feedback (Ducate & Arnold, 2017). They appreciate the detailed explanations and suggestions offered by automated systems, which help them understand their errors and improve their language skills (Wang, 2019).

EFL learners also appreciate the autonomy provided by automated feedback systems. They value the opportunity to receive feedback independently and at their own pace, allowing them to take ownership of their learning process (Wang, 2019). Learners perceive automated feedback as a resource that enables them to self-monitor and self-correct their language errors (Huang, 2018).

Automated feedback has been found to boost EFL learners' confidence in their language abilities. Learners feel more comfortable experimenting with language and taking risks in their writing or speaking tasks, knowing that they can receive immediate feedback to guide their improvement (Ducate & Arnold, 2017). This increased confidence promotes a positive learning environment and encourages learners to engage more actively in language practice.

EFL learners often express a preference for specific feedback provided by automated systems. They appreciate detailed explanations of their errors, including grammatical and lexical corrections, as well as suggestions for improvement (Wang, 2019). Learners value the clarity and precision of automated feedback, which helps them identify specific areas of improvement.

EFL learners appreciate the adaptability and customization options available in automated feedback systems. They find it beneficial to receive feedback tailored to their individual needs and language proficiency level (Huang, 2018). Learners value the ability to

customize feedback settings and preferences, allowing them to focus on specific linguistic aspects or areas they wish to improve.

EFL learners often see automated feedback as a complement to traditional teacher-provided feedback rather than a replacement. They believe that a combination of both automated and teacher feedback offers a more comprehensive and balanced approach to language learning (Ducate & Arnold, 2017). Learners appreciate the human expertise and personalized guidance that teachers provide, along with the efficiency and immediacy of automated feedback.

In conclusion, EFL learners generally exhibit positive attitudes toward automated feedback due to its immediacy and objectivity. They perceive it as a valuable learning tool that provides detailed explanations and suggestions. However, concerns about the limitations of automated feedback and the preference for human interaction in feedback delivery also exist. Understanding these attitudes and perceptions is crucial in designing effective and learner-centered automated feedback systems in EFL contexts.

EFL Learners' Resistance and Skepticism towards ACF

Potential resistance or skepticism toward technology-driven correction in language learning refers to the hesitation or doubt expressed by learners regarding the effectiveness, accuracy, or appropriateness of automated feedback systems. Despite the advantages that technology-driven correction offers, such as immediate feedback, objectivity, and adaptability, some learners may have reservations or concerns (Sinha & Nassaji, 2022).

One reason for resistance is the perception that automated feedback lacks the human touch and contextual understanding that teachers provide. Learners may feel that automated systems cannot fully capture the intricacies of language use or appreciate the nuances of their writing or speaking (Huang, 2018). They may value the personalized touch of feedback and

guidance that teachers offer, which they perceive as more tailored to their individual needs (Hinkelman, 2018).

Another aspect that can lead to resistance is the fear of overreliance on technology. Some learners may worry that relying too heavily on automated feedback may hinder their development of critical thinking and problem-solving skills. They may believe that automated systems can only provide surface-level corrections, without fostering deeper engagement and understanding of language use (Hinkelman, 2018).

Perceived limitations of automated feedback systems can also contribute to skepticism. Learners may question the accuracy and reliability of the feedback generated by these systems. They may be concerned about false positives or negatives, where the system may fail to identify errors or provide incorrect suggestions for improvement (Gruba, & Chau Nguyen, 2019). Learners may also worry about the potential for overcorrection or rigid adherence to prescriptive rules without considering individual writing styles or creative expression (Gruba, & Chau Nguyen, 2019).

Furthermore, learners' comfort and familiarity with technology can influence their skepticism. Those who have limited exposure to or confidence in using technology may be more resistant to technology-driven correction (Huang, 2018). Lack of technical proficiency or discomfort with digital tools may lead to skepticism about the reliability and usability of automated feedback systems (Wang, 2019)

It is important to address these concerns and skepticism to promote the effective integration of technology-driven correction in language learning. Educators and researchers can take several steps to mitigate resistance and enhance acceptance. Providing clear explanations of the benefits and limitations of automated feedback can help learners understand its purpose and value (Ducate & Arnold, 2017).

Also, offering opportunities for learners to compare and contrast automated feedback with traditional teacher feedback can help them see the strengths and weaknesses of each approach (Wang, 2019). Additionally, incorporating learner preferences and customization options in automated feedback systems can give learners a sense of control and ownership in the feedback process, potentially reducing skepticism (Gruba, & Chau Nguyen, 2019).

By addressing potential resistance or skepticism toward technology-driven correction, educators and researchers can foster a more open and positive attitude toward automated feedback systems. This can contribute to the effective integration of technology in language learning and enhance learners' language development and proficiency.

Influence of Learners' Perceptions on ACF Use and Effectiveness

Learners' perceptions play a significant role in influencing their acceptance and utilization of automated corrective feedback. Several studies have examined the relationship between learners' perceptions and their engagement with AF, shedding light on the various factors that shape their acceptance and utilization behaviors.

One factor that influences learners' acceptance of ACF is their perception of its *usefulness*. When learners perceive ACF as valuable and beneficial to their learning process, they are more likely to accept and utilize it (Winstone et al., 2017). For example, if learners believe that ACF provides accurate and timely feedback that helps them identify their strengths and weaknesses, they are more inclined to engage with it and incorporate the feedback into their learning strategies.

Another important perception influencing acceptance and utilization of ACF is learners' perception of its *credibility*. Learners are more likely to accept and utilize ACF when they perceive it as reliable and trustworthy (Winstone et al., 2017). Factors such as the transparency of the feedback generation process, the qualifications of the feedback provider, and the

alignment of feedback with their own understanding of the task contribute to learners' perception of ACF's credibility.

Learners' perceptions of the *fairness* of ACF also play a vital role in their acceptance and utilization. If learners perceive that ACF provides fair and unbiased feedback, they are more likely to accept and utilize it (Winstone et al., 2017). For instance, if learners believe that ACF treats all students equally and assesses their work objectively, they are more likely to trust and engage with the feedback.

Moreover, learners' *self-efficacy* beliefs influence their acceptance and utilization of ACF. Self-efficacy refers to learners' confidence in their ability to use ACF effectively. When learners have high self-efficacy in utilizing ACF, they are more likely to accept and effectively use the feedback provided (Winstone et al., 2017). Conversely, low self-efficacy may lead to skepticism or reluctance in engaging with AF.

Furthermore, learners' *prior experience* and familiarity with ACF can shape their perceptions and acceptance. If learners have positive previous experiences with ACF or have been exposed to it in previous courses, they are more likely to accept and utilize it in subsequent contexts (Nicol and Macfarlane-Dick, 2006). Familiarity with the features, functions, and benefits of ACF can increase learners' comfort and readiness to engage with it.

In conclusion, learners' perceptions significantly influence their acceptance and utilization of automated feedback. Factors such as perceived usefulness, credibility, fairness, self-efficacy, and prior experience play crucial roles in shaping learners' attitudes and behaviors towards ACF. Educators and designers of ACF systems should consider these factors to enhance learners' acceptance and effective utilization of ACF, ultimately promoting meaningful learning experiences.

Comparative Analysis: Automated vs. Teacher Feedback

The provision of feedback is a cornerstone of effective language instruction, particularly in the context of EFL writing. Traditionally, this feedback has been primarily administered by human evaluators, such as teachers and peers, who bring their linguistic expertise and contextual understanding to the task. However, with the advent of technology, automated feedback systems have emerged as a powerful complement to human-driven feedback. This comparative analysis delves into the dynamics of automated versus Teacher feedback in the realm of EFL writing instruction, aiming to shed light on their respective strengths, limitations, and implications for language learners (Saffarian et al., 2012)

The juxtaposition of automated and teacher feedback in EFL writing instruction raises essential questions and considerations. How do automated systems leverage artificial intelligence and natural language processing to identify and correct errors? In what ways does teacher feedback offer nuanced insights and guidance that extend beyond error correction? How do learners perceive and respond to feedback from these two distinct sources? What are the implications for learner autonomy and the cultivation of writing proficiency?

This comparative analysis embarks on a journey to explore the multifaceted dimensions of automated versus human feedback, recognizing that each approach brings a unique set of qualities to the table. By examining their respective roles in shaping EFL learners' writing development, we seek to provide educators, researchers, and language learners with a deeper understanding of the interplay between technology-driven feedback and the teacher touch in the pursuit of effective EFL writing instruction.

As we navigate this analysis, we will delve into the mechanisms through which automated systems and teacher provide feedback, examining their strengths and limitations. We will also explore the impact of these feedback sources on learner motivation, engagement, and autonomy. Through a comprehensive examination, this study aims to contribute valuable

insights to the ongoing dialogue about optimizing feedback practices in EFL writing instruction, considering both the technological advancements and the enduring importance of teacher expertise in language learning.

Differences between Automated Error Corrective Feedback and Teacher Feedback

This examination seeks to dissect and compare the fundamental differences between these two distinct feedback sources – automated error corrective feedback and teacher feedback (Saffarian et al., 2012).

Source and Mechanism

Automated error corrective feedback is generated by computer-based systems, employing artificial intelligence and natural language processing algorithms. These systems analyze written text and identify errors based on predefined linguistic rules and patterns. Feedback is provided instantaneously as learners compose or submit their work (Norman, 1990). In contrast, teacher feedback is generated by educators with expertise in the language. Teachers assess learners' writing, considering factors beyond error correction, such as content, organization, style, and coherence. Feedback is typically provided after a review of the complete text (Norman, 1990).

Objectivity vs. Subjectivity

Automated systems offer objectivity in error identification and correction. They apply consistent and standardized linguistic rules consistently, reducing variability in error correction and minimizing subjectivity. Learners receive uniform feedback (Zhang & Hyland, 2018), whereas teacher feedback incorporates subjectivity as teachers consider the context, purpose, and individual learner needs. This subjectivity allows for nuanced feedback but can also introduce variability and bias via providing varying interpretations and suggestions. This variability can affect the consistency of feedback (McCarthy et al., 2022).

Customization

Customization is constrained by the software's capabilities. Automated systems can be customized to some extent, allowing learners to set preferences and goals. However, the customization is limited to the capabilities of the software (Stevenson & Phakiti, 2019), while teachers can provide highly customized and personalized feedback tailored to individual learner strengths, weaknesses, and goals. This personalization is a notable advantage (Stevenson & Phakiti, 2019).

Feedback Depth

Automated systems excel in identifying surface-level errors, such as grammar and spelling mistakes. They are less effective at providing deep insights into higher-order writing concerns like content, organization, and coherence. (Wilson & Andrada, 2016), while teachers offer feedback that spans from surface-level errors to complex issues like content, argumentation, and creativity. They can address the full spectrum of writing elements (Wilson & Andrada, 2016).

Timeliness

Automated systems provide immediate and actionable feedback, allowing learners to make corrections and revisions promptly in real-time while the writing is fresh in their minds (Deeva et al., 2021). This immediacy contrasts with traditional time-consuming feedback methods, where teacher feedback may have a longer turnaround time and learners might have to wait for teachers to review their work and provide comments, especially in large size classes where educators need to review and assess multiple assignments (Ferris, 2010). This delay can impact the revision process (McCarthy et al., 2022).

Contextual Understanding

Automated systems may struggle with understanding nuanced context in writing, leading to occasional incorrect corrections or misinterpretations, whereas human teachers

have the ability to understand the context in which the writing was produced, leading to more accurate and contextually relevant feedback (Wilson & Roscoe, 2020).

Motivation and Engagement

Automated feedback can be motivating due to its immediacy and the entertainment elements some systems incorporate. However, it may lack the personal connection between teachers and learners (Kyriakidis et al., 2019) which can foster deeper learner engagement and motivation. Learners may be more inclined to act on feedback from a trusted source (Zhang, 2020).

Autonomy Improvement

Automated systems promote learner autonomy by encouraging self-revision and error correction (Cotos, 2011), and teacher feedback also can foster learner autonomy when it includes guidance on self-editing and improvement strategies (McCarthy et al., 2022).

In summary, automated error corrective feedback and human teacher feedback each bring distinct qualities to EFL writing instruction. The choice between automated error corrective feedback and human teacher feedback in EFL writing instruction involves a trade-off between efficiency, personalization, and depth of analysis. Automated feedback excels in efficiency and consistency but may lack personalization and depth. Human teacher feedback offers personalization, depth, and contextual understanding but may be more time-consuming and subject to variability. An effective EFL writing instruction approach may harness the strengths of both sources, striking a balance that suits the specific needs and goals for EFL learners' development

Combination of Automated Corrective Feedback and Teacher Feedback Approaches

Automated feedback represents a dynamic and innovative addition to the realm of language education, offering a complementary dimension to traditional feedback approaches. While traditional feedback methods, such as teacher-provided feedback and peer review, have

long been valuable components of language learning, automated feedback introduces a new layer of immediacy, consistency, and objectivity (Liaqat, Munteanu, & Demmans Epp, 2021).

Traditional feedback approaches often rely on teachers who provide insights and suggestions based on their expertise and perception of the learners' work. This human element introduces subjectivity, as different evaluators might prioritize different aspects of writing or interpret errors differently. Additionally, the time required for educators to review and respond to each piece of writing can result in delays in learners receiving feedback (Ghufron, 2019).

Automated feedback, on the other hand, operates without the limitations of human constraints. It offers instant evaluations by utilizing advanced algorithms to identify errors and provide suggested corrections based on predetermined linguistic rules and patterns. This immediacy is particularly beneficial in enhancing learners' revision process, as they can promptly address errors while their writing is still fresh in their minds (Liaqat, Munteanu, & Demmans Epp, 2021).

Furthermore, the consistent application of automated feedback ensures that learners receive standardized corrections across different assignments. This consistency can be challenging to achieve with traditional teacher feedback approaches, where discrepancies in feedback might arise due to variations in evaluator perspectives or time constraints (Heift & Hegelheimer, 2017).

By combining automated and teacher feedback approaches, educators can offer learners a holistic feedback experience. Teacher feedback, with its nuanced insights and personalized guidance, can provide learners with a deep understanding of their strengths and areas for improvement. Meanwhile, automated feedback can quickly identify and rectify common errors, allowing learners to focus more on higher-level writing concerns during the revision process.

This harmonious integration of automated and teacher feedback aligns with the principles of personalized learning and learner autonomy. Learners receive both immediate corrective insights and tailored suggestions for improvement, creating a collaborative environment that empowers them to take charge of their language learning journey (Ranalli, 2018).

In summary, the integration of automated feedback complements traditional teacher feedback approaches by providing immediacy, consistency, and standardized error correction. The symbiotic relationship between these two feedback methods creates a comprehensive learning experience that equips learners with the tools to effectively refine their writing skills and improve their autonomy.

Conclusion

The investigation of automated error corrective feedback within the realm of English as a Foreign Language (EFL) writing instruction has unveiled several critical findings. These findings highlight the intricate interplay between technology and education, revealing both the promises and challenges associated with automated feedback systems.

A noteworthy discovery is the capability of automated feedback systems to provide immediate and highly targeted feedback to learners. This feature not only expedites the learning process but also allows students to pinpoint their writing deficiencies in real-time. Consequently, students can make rapid improvements, enhancing their language skills and writing proficiency.

Another prominent finding is the role of automated feedback in cultivating learner autonomy. These systems empower students to take ownership of their learning journey by encouraging self-assessment and goal-setting. Learners can autonomously identify areas for improvement, actively engage in the revision process, and tailor their learning experiences to meet their specific needs and preferences.

Alongside the advantages, this investigation has underscored several challenges and limitations associated with automated error corrective feedback. Impersonality remains a concern, as some learners miss the personal touch and guidance provided by human instructors. Moreover, questions regarding the reliability of automated systems, especially in capturing nuanced language nuances, persist. Additionally, there is a looming concern of overreliance on technology, potentially inhibiting the development of critical thinking and independent learning skills.

The investigation has revealed that automated feedback aligns harmoniously with the evolving landscape of language education. In an era characterized by digital connectivity and the quest for personalized learning experiences, these systems cater to the needs and preferences of modern learners. They seamlessly integrate into blended and online learning environments, supporting both educators and students in their pursuit of effective language learning.

This investigation holds significant implications for educators, curriculum designers, and researchers. Educators should receive training in the effective integration of automated feedback, leveraging its advantages while mitigating its limitations. Curriculum designers should consider these systems as valuable supplementary resources, aligning them with curriculum objectives. Researchers should continue to explore the long-term impact of automated feedback on learner motivation, proficiency, and critical thinking skills, addressing ethical considerations and ensuring accessibility and inclusivity.

In conclusion, the investigation of automated error corrective feedback has illuminated a path toward more efficient, learner-centric, and technology-enhanced EFL writing instruction. By understanding the multifaceted nature of automated feedback, educators and researchers can harness its potential while navigating its challenges, ultimately contributing to the advancement of language education in the digital age.

Section Two: “Write and Improve” Program

In an increasingly interconnected world where English proficiency is a valuable skill, language learners and educators are continually seeking innovative tools to enhance writing skills. "Write & Improve," developed by Cambridge English, emerges as a remarkable solution in this quest for effective language learning and teaching. This online platform has revolutionized the way learners of English engage with the writing process, offering an array of features designed to provide instant feedback, personalized learning experiences, and invaluable opportunities for skill improvement (Thao et al., 2023). As we delve into the intricacies of the "Write & Improve" program, we will explore how this cutting-edge tool empowers language learners, supports educators, and aligns with the evolving landscape of language education.

What is Write and Improve?

"Write & Improve" is an online platform and writing tool developed by team of experts at Cambridge University. It is designed to help individuals improve their English writing skills by providing instant feedback on their written work. "Write & Improve" uses advanced natural language processing technology to analyze and assess written texts, offering suggestions for improvement in terms of grammar, vocabulary, and overall writing quality (Thao et al., 2023).

Table 2

Review of "Write and Improve" (retrieved from Write and Improve platform)

Title	Write&Improve
Website	https://writeandimprove.com/
Product type	Online English automated writing evaluation platform
Publisher	Cambridge English Language Assessment – University of Cambridge Cambridge University Press & Assessment, Shaftesbury Road, Cambridge, CB2 8EA Telephone: +44(0)1223 553311 E-mail: directs@cambridge.org https://www.cambridgeenglish.org/learning-english/free-resources/write-and-improve/
Language	English
Level	Six levels based on Common European Framework Reference (CEFR) levels: A1, A2, B1, B2, C1 and C2
Target Audience	English language learners English language teachers
Operating system(s)	iOS, Android AS system and PC
Registration	Not required
Hardware	An internet-accessible device
Price	-Write&Improve: free -Write&Improve + Test Zones: £4.50 per month -Write&Improve + Class View: First 10 members: £11/month (£1.10/member) Next 40 members: £1.10 every month per member Next 50 members: £0.90 every month per member Additional members: £0.80 every month per member

Guide to Operate Write & Improve

Access to the Free Area

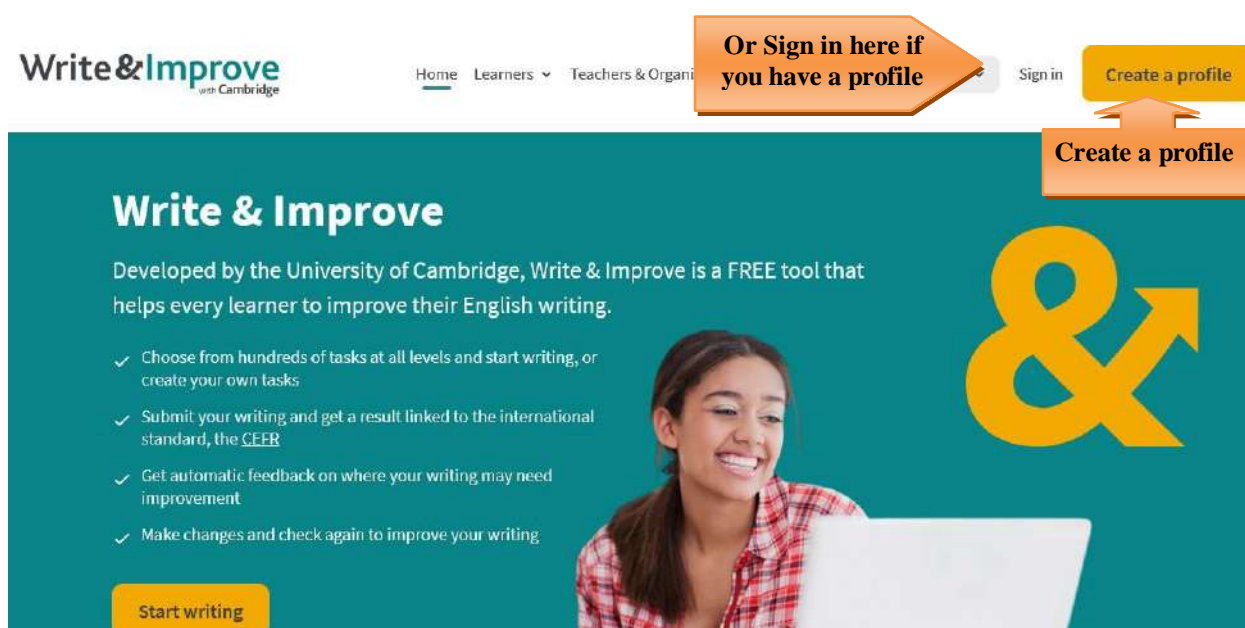
Step 1: Access Write & Improve

- 1. Open a web browser.** On your computer or mobile device.
- 2. Navigate to the Write & Improve website.** <https://writeandimprove.com/>. You can usually find it by searching "Write & Improve" in your preferred search engine.
- 3. Create an Account or Sign Up.** If you are a new user, you may need to *create an account* or *sign up*. Follow the on-screen instructions to complete the registration process. If you are

an existing user, you can log in using your credentials. the registration is quite simple, you create a user name and a password, you can even sign in with your facebook account. Registration is not an obligatory step, you can directly go down to the bottom and click on “Start Writing”.

Figure 6

Write & Improve Home page



Step two: Access the User Interface

4. Once you are logged in. you will find the user interface where you see a number of available writing prompts or exercises. These prompts can vary in topics and difficulty levels.

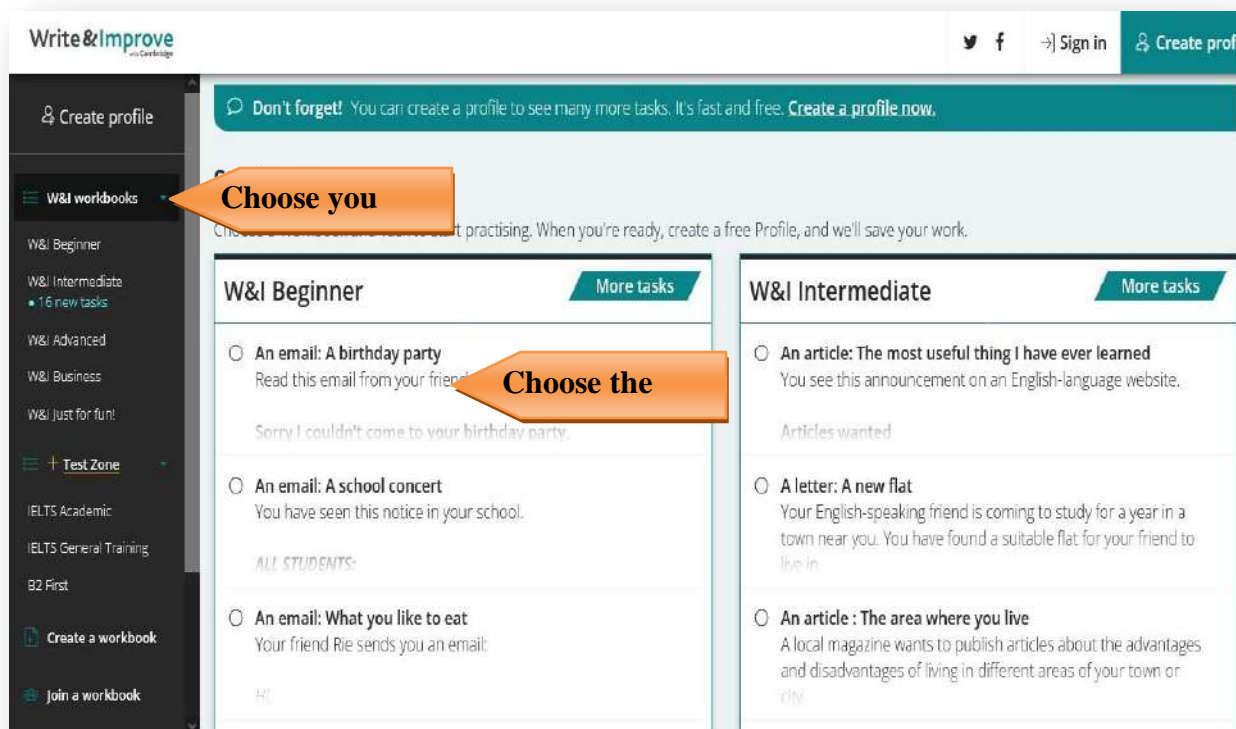
5. Choose the Appropriate level. There are three main categories to choose your level from: beginner (A1 and A2), intermediate (B1 and B2) and advanced (C1 and C2). There is also a business category (for ESP students) and Just for fun category (for those who study English for the sake of entertainment or for personal interests).

6. Choose the task. When you access the platform, you will be presented with a variety of writing tasks to choose from. These tasks cover different topics and writing styles, such as

essays, articles, emails, and more. You can select a task that aligns with your learning goals or current level of proficiency.

Figure 7

User Interface in Write & Improve.



Step three: Choose Writing Prompt and Write your Response

7. Select a writing prompt that suits your current skill level or the topic you want to practice.

Click on the prompt to begin.

8. Write Your Response. Once you've selected a task, you'll be prompted to write your response to that task in a text box where you can type/ paste your response.

Figure 8

Students' Writing Page

Step Four: Submit Your Writing

9. Submit Your Writing. After you have written your response, you will submit it for analysis. Click the “Check” button, usually located at the bottom of the text box.

10. Immediate Feedback. The standout feature of Cambridge Write & Improve is its instant feedback system. The platform uses advanced language analysis technology to evaluate your writing. It checks for various aspects, including grammar, vocabulary, sentence structure, and overall coherence.

11. Correction Codes. The feedback may use correction codes to point out errors or areas that need attention. You can refer to a key to understand what each code means and make the necessary revisions.

Figure 9

Write & Improve Feedback Explained

Feedback explained

Word-level feedback

- ! Incorrect word? Is this word correct?
- ▲ Did you forget something before this word?
- ▶ Did you forget something after this word?
- ☆ Suspicious word. Something doesn't look right about this word.

Sentence-level feedback

This seems to be a good sentence.

This sentence could maybe be improved.

There are some problems in this sentence.

Level ?? **CEFR level feedback**

- C2 Mastery or proficiency
- C1 Effective operational proficiency or advanced
- B2 Vantage or upper intermediate
- B1 Threshold or intermediate
- A2

12. Receive Feedback and Suggestions. Within moments, you will receive feedback on your writing. This feedback is presented in a user-friendly format, often highlighting specific sentences or phrases that need improvement. You will also get suggestions for corrections and enhancements.

Figure10

"Write & Improve" Feedback Provision

Task help Level A1 x

Feedback Changes **Writing Level**

& Your level for this new writing is A1. That's OK. You can improve your writing. Start now. Read your work and the feedback. Make changes and click Check again.

Hi Marcos,
 I am in Greece. I am with my mum and dad and sister and
 bother. The last I went downtown. Food it
 was good. Tomorrow I will go for swim. I like
 Greece.
 Loves
 Luis

Feedback Codes

13. View the feedback carefully. Each error or suggestion is typically accompanied by an explanation or example of how to correct it.

Figure 11

Learner's feedback View

Nowadays, English is very important. It appears in business, economy, media, travel, communication. Learning English is the best way to help you in the future. I choose to follow learning English at university. With the development of science and technology, Specially, Vietnam become a member of WTO. It is a cooperation come to Vietnam. When they come to Vietnam, they speak English well to work in a foreign company for them. Using English to communicate with customers. On the other hand, everyday. So, always select the staff who can use English well. WOJIN Vina company comes from Korea. So, they need the high level staffs in their company.

Wrong word? X

You may need a different word.
 Perhaps "in particular" is better.

Next

As you know, internship is very important. It helps the students use the knowledge to combine with the real life to work. On the other hand, it helps students get more experiences, the behaviors in many difficult situations. During the internship at WOJIN Vina company, I got a lot of

Step Six: Make Revisions and Track Progress

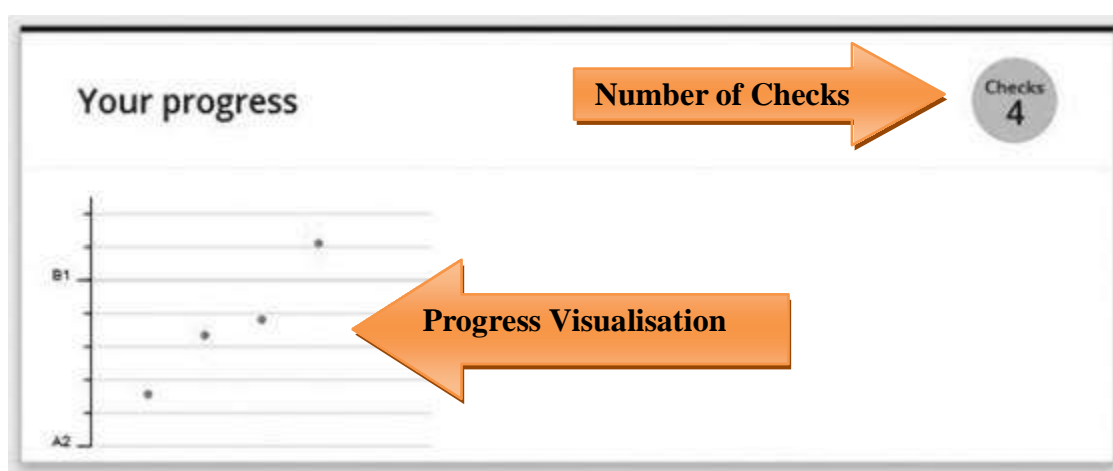
14. Rewrite. Based on the feedback you receive, make revisions to your writing. You can edit your response directly within the platform. Aim to address the highlighted errors and improve the overall quality of your text.

15. Resubmit. You can choose to resubmit your revised text to get additional feedback. This step is optional but can be helpful for further improvement.

16. Track Your Progress. Write & Improve often provides a scoring system or level assessment for your writing. Take note of your score and how it changes over time to track your progress.

Figure 12

Students' Progress Graph



Step Seven: Explore Other Prompts/ Log Out

Explore Other Prompts. If you wish to practice more, you can return to the main page and choose another writing prompt to work on.

Log Out. When you've finished your writing practice, you can log out of your Write & Improve account if you wish.

That is a basic guide to operating Write & Improve. Regular practice and thoughtful review of feedback are keys to improving writing skills using this platform.

How to Create a Workbook on Write and Improve

In “Write and Improve” learners as well as students teachers may want to create their own workbooks and tasks for their home-works, class projects, or for topics they like or they enjoy writing about.

1- Go to your “write and Improve” account.

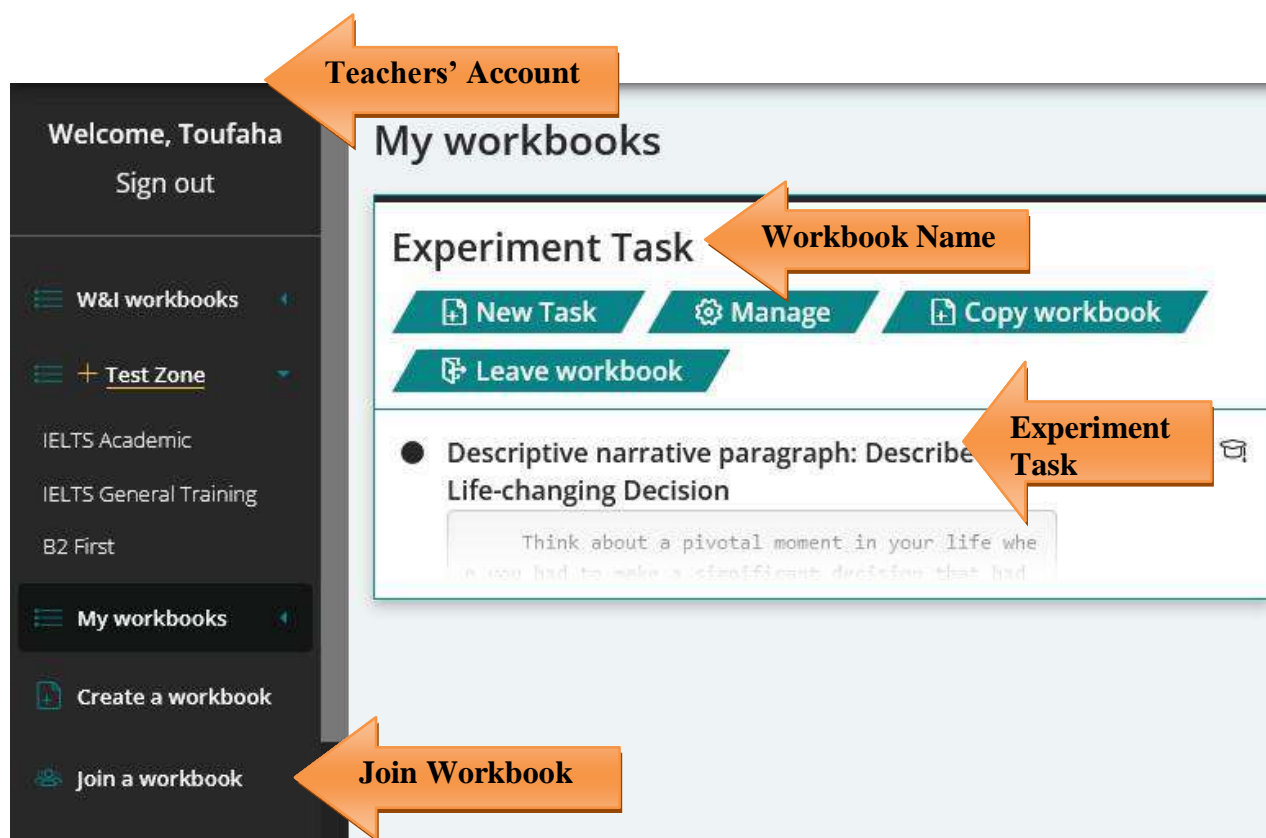
2- On the left, click on create a work book.

3- it will ask you to provide a name to the workbook, and then in green, click on create

4- To create a task, click on “new task”: choose the type of the task (report, essay, email, paragraph,...), many options are provide.

5- It is also possible to copy a task that suits your writing goal from “write and Improve” platform.

For this study, the teacher creates a work book and provides it the name “*Experiment tasks*” and invites the experiment participants to join this workbook.

Figure 13*Write & Improve Workbook***+Class View Area**

+Class View is an area for teachers via which they can monitor their students' progress. Using this area, teachers can easily support their students with extra feedback in addition to WIF. Actually, +class view area is not for free, but there is a trial period of two months which is for free, it is a good opportunity for both students and teachers to experiment with this area on the platform. To access +class view:

- 1- Click on class view on the left
- 2- Create a profile as a teacher (click on "I am a teacher box)
- 3- Click on 2 month trial period .
- 3- Create a group workbook and include your students this workbook.

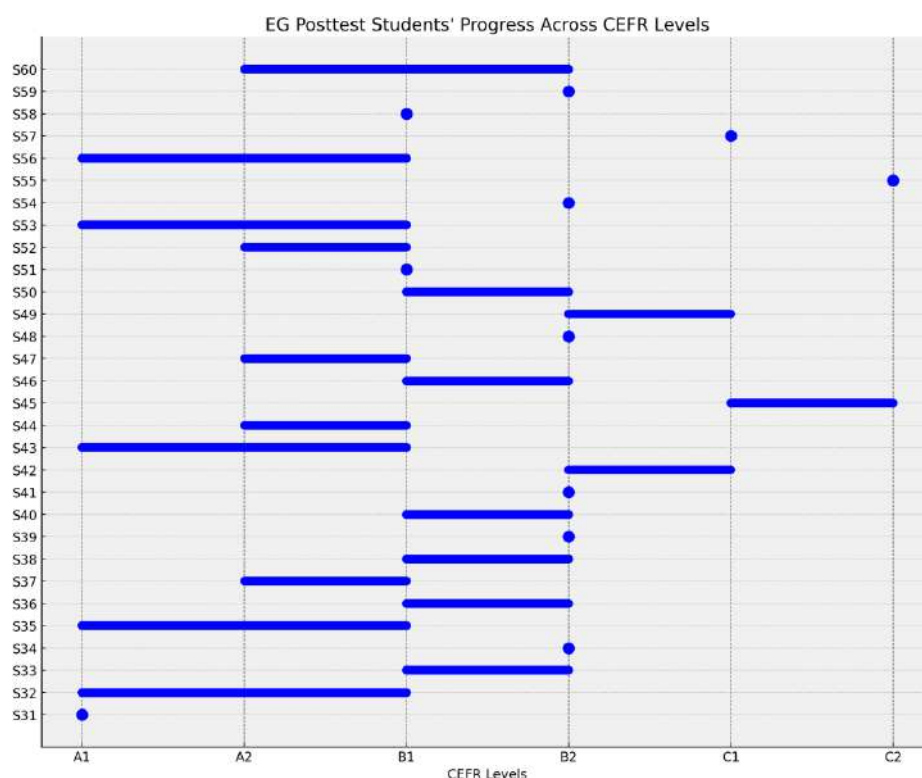
Figure 14*+Class View Options*

The screenshot shows the 'Write & Improve + Class View' interface. The page title is '+ Class View - Interactive Example Class'. There are several callouts pointing to specific features:

- Download data**: Points to the 'Download data' button in the top right corner.
- View your students' workbooks**: Points to the '+ Class View' option in the left sidebar.
- View your students' completed tasks**: Points to the 'Tasks' dropdown menu.
- View all or individual students' work**: Points to the 'Students' dropdown menu.
- View how many times a task was attempted**: Points to the 'Checks' dropdown menu.

The interface also includes a 'Subscribe to + Class View' button, a 'Back to My + Class View' button, and a 'Download data' button. The main content area displays a welcome message and a list of workbooks, tasks, students, and checks.

Additionally, teachers can also monitor their students' progress from the first submitted draft to the final one through a number of different graphs: The score range graph, CEFR progress graph, students' progress heatmap. Here is the example of CEFR progress graph of our experimental group participants.

Figure 15*Example of Score Range Graph*

Features of “Write & Improve”

Write & Improve boasts several features that make it a robust and effective tool for enhancing English writing skills. One of its primary strengths is its *immediate feedback* mechanism. As users submit their writing assignments, the platform swiftly analyzes the text, highlighting errors in grammar, vocabulary, and overall structure. This real-time feedback offers learners invaluable insights into their writing and helps them promptly identify and correct mistakes (Ofiaz et al., 2022).

Another noteworthy feature is its *adaptability and personalization*. Write & Improve tailors feedback to each user's unique proficiency level, providing customized suggestions for improvement. This personalized approach ensures that users receive guidance that aligns with

their individual language learning needs, making it a valuable tool for learners at various stages of proficiency (Criollo Toscano, 2023).

Flexibility is another key attribute. Write & Improve accommodates both self-paced learning and structured assignments. Learners can practise writing skills at their convenience, making it suitable for in-class and out-of-class use. This flexibility caters to diverse schedules and learning preferences, allowing users to engage with the platform as per their convenience independently (Criollo Toscano, 2023).

For instructors, Write & Improve offers robust *progress tracking* capabilities. Teachers can easily monitor their students' development by reviewing their writing scores and improvements over time. This data-driven approach informs instruction and enables educators to provide targeted support where needed, enhancing the overall teaching and learning experience (Tursina et al., 2021).

Variety of writing prompts is another asset of Write & Improve. It provides a wide range of writing prompts that instructors can customize to align with classroom objectives and themes. This ensures that writing assignments are relevant to the curriculum and engage learners with a diverse array of topics and styles (Karpova, 2020).

Furthermore, the platform supports *peer review* exercises, enabling students to review and provide feedback on their peers' work. This collaborative element promotes interaction, exposes students to different writing styles, and encourages learning through peer engagement.

The exposure of “Write & Improve” to *different English varieties*, such as British and American English, enhances learners' adaptability and cultural awareness of linguistic diversity—an essential skill in today's globalized world

In addition to the previous features, “Write & Improve” provides valuable data for in-class *error analysis* sessions. Teachers can use this feedback to engage students in discussions

about common writing mistakes (Zafar, 2016). Also, the scoring system and the opportunity to improve scores can *motivate* students to actively engage in writing practice, fostering a desire for continuous improvement

Instructors can integrate "Write & Improve" seamlessly into their lesson plans by customizing writing prompts. This ensures that writing assignments align with classroom objectives and themes, reinforcing the connection between practice and learning outcomes.

Moreover, the platform supports various assessment needs. Instructors can employ Write & Improve for *formative assessments* to gauge students' writing proficiency during the course. It can also be incorporated into *summative assessments* to evaluate overall language development.

Finally, Write & Improve caters to both ESL (English as a Second Language) and EFL (English as a Foreign Language) courses, making it a versatile addition to English language teaching and learning. Its technology-driven approach enhances writing skills effectively, catering to the diverse needs of students and instructors alike.

Concerning the negative features related to the use of "Write & Improve", the over-reliance on technology is one of these features. Depending solely on automated feedback may hinder the development of critical thinking and problem-solving skills that come from human interaction and discussion. Another problem related to "Write & Improve" is its dependence on the internet, it requires an internet connection, which may be a limitation in areas with limited or unreliable internet access. Also, "Write & Improve" may not be well-suited for creative writing or assignments that require a high degree of *originality and creativity*. Users also may have concerns about the *privacy and security* of their written work when using an online platform. Finally, it cannot be a substitute for human feedback, While Write & Improve is a valuable tool, it should complement, not replace, feedback from human instructors who can provide more comprehensive and qualitative guidance.

Overall, Write & Improve's comprehensive feature set, including immediate feedback, personalization, flexibility, progress tracking, variety, peer review, and linguistic diversity, makes it a valuable asset for learners and instructors alike in the pursuit of improved English writing skills. However, it should be used in conjunction with other teaching methods and not as a sole means of instruction to address its limitations, such as the lack of human interaction and context sensitivity.

Areas of Using “Write & Improve” Program

Write & Improve offers a wide array of versatile applications, making it an invaluable tool for learners, teachers, and individuals seeking to enhance their English writing skills in various educational and professional contexts.

Language Learning and Improvement

Write & Improve can be a valuable tool for individual language learners looking to enhance their English writing skills. By selecting prompts that match their proficiency level, learners can engage in regular practice, gradually working towards more challenging topics (Isaeva, 2022).

Classroom Assignments

Instructors can integrate Write & Improve into their classroom assignments. They can assign writing tasks to students as part of their coursework, either as homework or in-class activities. This provides students with structured opportunities to practice their writing skills (Tursina et al., 2021)

Formative Assessment

Teachers can use Write & Improve for formative assessment purposes. By regularly evaluating students' writing abilities, educators can identify areas where improvement is needed and tailor their teaching methods accordingly (Tursina et al., 2021).

Summative Assessment

For more comprehensive evaluation, Write & Improve can be incorporated into summative assessments. Instructors can assign specific writing tasks that align with course objectives, providing a holistic view of students' language development.

Individualized Learning Plans

Write & Improve facilitates personalized learning plans. Instructors can assign prompts that specifically address each student's language deficiencies, allowing them to focus on areas that require improvement the most.

Peer Review and Collaboration.

The platform supports peer review exercises, enabling students to review and provide feedback on their peers' work. This collaborative approach fosters interaction and exposes students to different writing styles and perspectives (Isaeva, 2022).

Language Variation Awareness

Write & Improve can be used to introduce students to different varieties of English, such as British and American English. This exposure helps students become more adaptable and culturally aware of linguistic diversity.

Error Analysis and Discussion

In-class error analysis sessions can be conducted using Write & Improve's feedback data. This allows students to collectively examine common writing mistakes, encouraging deeper discussions about language nuances (Zafar, 2016).

Progress Tracking and Goal Setting

Instructors can monitor students' progress by reviewing their scores and improvements over time. This data-driven approach helps set writing goals tailored to each student's performance.

Exam Preparation

For exam preparation, such as IELTS or TOEFL, Write & Improve serves as a valuable practice platform. It provides feedback to help students refine their writing skills in preparation for standardized tests.

Professional Writing Development

Write & Improve is not limited to academic settings; it can also be utilized for enhancing professional writing skills. Individuals seeking to improve workplace communication, including business emails, reports, and proposals, can benefit from the platform.

Language Club or Writing Group Activities

Language clubs or writing groups can leverage Write & Improve for regular practice sessions. Members can use the platform collectively, fostering a supportive environment for language improvement.

Homework Assignments

Assigning writing tasks on Write & Improve as homework ensures that students have access to constructive feedback even outside the classroom, promoting continuous learning (Tursina et al., 2021).

Language Assessment for Hiring or Promotion

In professional contexts, HR professionals and employers can employ Write & Improve to assess candidates' or employees' English language proficiency, particularly if the role requires strong written communication skills.

Writing Portfolio Development

Write & Improve allows students to maintain writing portfolios, showcasing their progress and development over time. This can be particularly useful for language learners creating portfolios for academic or professional purposes.

These diverse Write & Improve areas of use make it a versatile and adaptable tool for learners, teachers, and individuals seeking to enhance their English writing skills across various educational and professional contexts.

Conclusion

"Write & Improve" is an online feedback program, helps learners and teachers in their learning and teaching of writing skills. The present section delves in exploring it from different facets, including its main characteristics via presenting a detailed explanation of how it typically works, its main positive and negative features, and the main areas in which it the "Write & Improve" is used.

Chapter Four

Chapter Four: Research Design and Methodology

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Chapter Four: Research Design and Methodology

The present study investigates the effectiveness of integrating Automated Error Corrective Feedback (ACF), a natural language processing tool, in EFL writing classes in ameliorating Algerian EFL students' writing proficiency and autonomy. More precisely, it explores the impact of using "Write and Improve" automated corrective feedback (WIF) software within writing instruction in first year Licence students' written expression and comprehension classes. Furthermore, the present study seeks for understanding students' attitudes and perceptions towards the incorporation of ACF correctors in their writing course.

The preceding chapters have paved the way by comprehensively reviewing the existing body of literature relevant to our research focus, while the present chapter introduces the practical part of this thesis via presenting in details the research design and methodology. First, the general methodological framework of the research was explained with a main focus on the adopted research methods and design. Then, the tools used for collecting research data were thoroughly discussed and the participants involved in the research were described with a clear justification of the sampling strategy. Finally, the chapter closes with the data processing and analysis procedures.

Research Design

"Research design" refers to the structured plan or framework that outlines the systematic process of conducting a research study, including the methods, procedures, and strategies used to collect and analyze data (Leedy & Ormrod, 2021). It helps researchers collect reliable data, minimize bias, and efficiently allocate resources. By addressing ethical considerations, it ensures the validity and reliability of findings. Additionally, it aids in data analysis, interpretation, and clear communication of the research plan to others, facilitating a successful research process.

The research design employed in the study is a *mixed-method triangulation design*. This research design combines both quantitative and qualitative approaches to comprehensively investigate the impact of integrating automated error corrective feedback on EFL learners' writing proficiency and autonomy. The use of mixed methods allows for a holistic exploration of the research questions and hypotheses, providing a more comprehensive understanding of the phenomenon under investigation.

Mixed-methods design is regarded as practical research design for classroom research particularly for exploring issues and topics that are rooted within intricate academic or social contexts (Mertens, 2005 as cited in Dörnyei, 2007). Dörnyei (2007) agreed, arguing that “the understanding of the operation of complex environments-such as classrooms- owes itself to mixed method research” (p.186). Therefore, using mixed-methods research technique allows the researcher to analyze the issue being examined from different perspectives (quantitative & qualitative), deepen understanding and help make clear and firm conclusions regarding the subject under study. This research method is particularly chosen by the researcher because it is thought as the most appropriate for answering the research questions and sub- questions of this study, namely:

1- What are the prevalent types of errors observed in the writing of Algerian EFL learners?

- a. How frequently do different types of writing errors occur among Algerian EFL learners?
- b. What factors contribute to the manifestation of these writing errors?
- c. Which tools and strategies do EFL learners use to self-correct their writing errors?

2- Does the incorporation of “Write and Improve”, an automated error corrective feedback tool, in Algerian EFL writing classes affect learners' writing proficiency?

- a- To what extent can the use of “Write and Improve” foster Algerian EFL students’ writing proficiency?
- b- What are the most common writing errors detected and corrected by automated writing error correctors?
- c- What are the writing errors that remain unaddressed by automated writing error correctors?
- d- How accurate is the feedback provided by automated writing error correctors?
- e- In what ways does automated error corrective feedback differ from teacher- provided feedback?

3- Does the use of “Write and Improve” have an effect on students' autonomy in writing?

- a- How does the use of “Write and Improve” affect EFL students’ motivation to write in English?
- b- How does the use of “Write and Improve” affect EFL students’ self-directedness/teacher- independence when writing in English?
- c- How does the use of “Write and Improve” affect EFL students’ writing self-correct strategies?

4- What are EFL learners' attitudes towards the use of “Write and Improve” in their writing class?

- a- How do EFL learners interact with “Write and Improve” while engaging in English writing?
- b- To what extent do EFL learners employ “Write and Improve” to rectify their writing errors and enhance their autonomy?
- c- How effectively do EFL learners utilize “Write and Improve” to refine their writing skills?

d- What factors might influence students' engagement with "Write and Improve" and their inclination towards incorporating it in EFL writing classes?

The first research question aims at investigating Algerian EFL students' overall experience with writing in English, shedding the light on the main writing difficulties they encounter via : highlighting the most frequently occurred errors in their writings, identifying the factors cause these errors, and discussing the strategies they use to self-correct their writing errors. Hence, to answer the first research question, the researcher uses a pre-experiment questionnaire (Appendix 01) devoted to first year EFL students in the department of English at the university of Souk-Ahras to collect both qualitative and quantitative data.

As for the second research question, it aims to explore whether or not the incorporation of WIF correctors within writing instruction classes minimizes EFL students' writing errors and, therefore, enhances their overall writing proficiency and autonomy. Thus, the use of quantitative data collection tool is required and an experiment is needed so as to measure changes in writing proficiency among the participants. These assessments provide quantitative data that can be analyzed statistically to determine the effectiveness of using automated correctors within writing course instruction (independent variable) on minimizing EFL students' writing errors and enhancing their writing proficiency and autonomy (dependent variables) by addressing a causal relationship between the independent and the dependent variables.

Generally, there are various types of experimental research; the researcher has opted for the quasi-experimental design which is the most suitable for classroom research. According to Dörnyei (2007) "in most educational settings, random selection of students by the researcher is hardly achievable and therefore researchers often have to resort to quasi-experimental research" (p.117).

Since the quasi- experimental design also has different variations, namely: pre-experimental designs (the one group pretest-post-test design, the one group post-tests only design, the post-tests only non-equivalent design, and the non-equivalent pretest- posttest control group design (Cohen, Manion & Morrison, 2007); the researcher opts for this later, i.e, *the quasi- experiment with non-equivalent pretest-posttest control group design*. Reasons behind choosing this particular design are explained in the following subsections of this chapter.

As far as the fourth research question is concerned, it seeks to find insights about the students' attitudes and perceptions of the integration of ACF correctors in the writing course. Qualitative data are required so as to gain deeper understanding of how EFL learners interact with the feedback tool and the factors that influence their engagement with it. Therefore, to elicit these qualitative data, a post-experiment semi-structured interview is conducted with first year Licence EFL students from those who participated in the experiment.

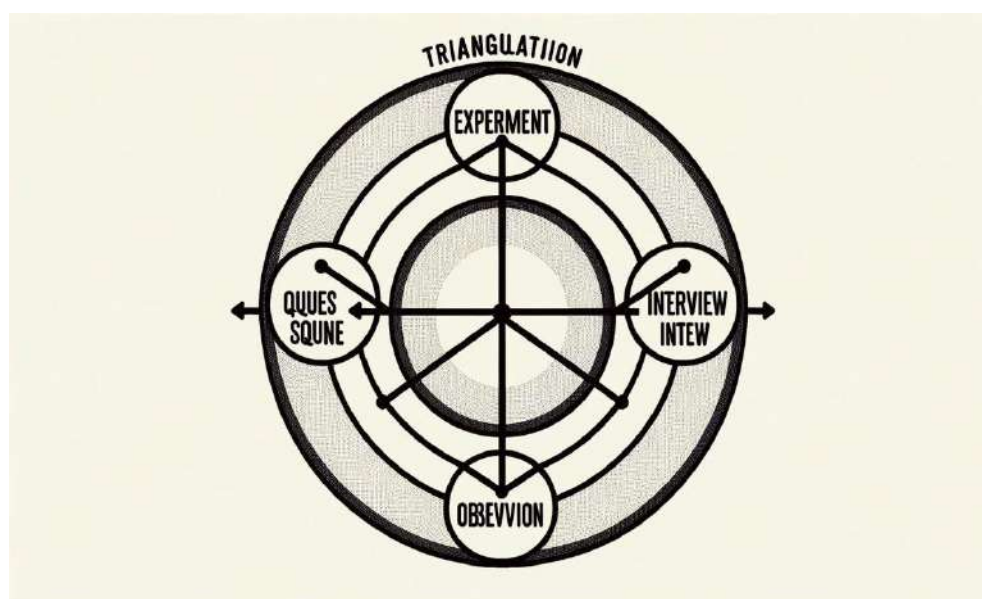
Furthermore, a classroom observation took place during the experimental phases by the teacher researcher to give our research more detailed information and data for better comprehension of the subject under examination.

The employed research methods aimed to provide a clear view of students' practices over the experiment for more accurate and trustworthy findings that could be used by future teachers and learners in EFL writing classrooms. Since this research aims to incorporate both quantitative and qualitative data, it necessitates the use of varied research tools. Thus, a triangulation of research methods is essential. Cohen, Manion, & Morrison (2007) describe triangulation as employing multiple data collection methods to study human behavior aspects. This technique ensures data consistency, enhancing its validity and reliability (Bryman, 2004). Using a single method has its limitations, which triangulation can mitigate. Triangulation also provides a more comprehensive view of educational results (Cohen,

Manion & Morrison, 2007). The strength of methodological triangulation lies in its use of diverse methods that complement each other, making it perfect for this study aiming to integrate both quantitative and qualitative data for robust results. Accordingly this study uses triangulation since it depends on varied data collection techniques.

Figure 16

Triangulation of Data Collection Tools (Victor Diagram)



Participants

Population of the study

The present research involved first year LMD English as a foreign language students in the Department of English Language at Mohamed Cherif Messaadia University -Souk Ahras, (Algeria), who constitute the population of the study. These are participated in the students' pre-experiment questionnaire, the quasi-experiment, the classroom observation, and the post-experiment interview. The total number of the population, from which the sample was taken, was 135 students. All students have been at university for one semester and half; they have been accepted to the Department of English based on identical requirements, and have received the same courses in a number of modules. This population represents the pool from

which a sample is selected for the research study on the impact of automated error corrective feedback on EFL learners' writing skills and autonomy.

Sample of the study (Sampling Procedures and Inclusion Criteria)

The process of selecting particular elements from a population to participate in a study is referred to as sampling, whereas the sample itself is “a smaller version of the population, the group to which the researcher would ultimately like to generalize or apply the results of the study” (Lodico, Spaulding, & Voegtle, 2010, p. 25). Samples enable researchers to work with a smaller and more manageable group out of the realistic population.

In educational research, there are two key sampling designs: probability (random) sampling and non-probability (non-random) sampling; each design involves a number of sampling methods (techniques). In this study, the subjects who carried out the experiment were selected throughout three stages based on non-random sampling design, taking into consideration specific criteria to determine which participants would be included. These criteria served as guidelines for selecting individuals who best represented the target population and aligned with the research objectives. The selection process aimed to ensure representation across three main characteristics, the participants' academic year, their prior experience with English writing instruction and their language proficiency levels.

Firstly, the inclusion criteria focused on the participants' academic year. The individuals selected for the study were first year EFL students at MCMU. Three (03) groups were selected out of the four groups constituting second year level; they were group one (G1) and group two (G2) and group three (03) with a total number of 105 out of 135 students, with thirty five (35) students in each group. This shared starting point in their English language learning journey provided a foundational commonality among participants, facilitating a cohesive basis for data collection and analysis.

Secondly, concerning the participant's prior experience with English writing instruction, before joining the Department of English, these students had studied English language for seven years; four years in the middle school and later three years in the secondary school. They also must have successfully passed the final official Baccalaureate exam and obtained satisfactory marks in English language to be eligible to study English at the University. They are still studying to get a bachelor's degree in English language; a degree which would permit them to be EFL teachers in the middle school according to the Algerian educational regulations. They have been at university for one semester and a half; As this study was conducted during the second semester of the academic year 2021-2022, students must have, then, received a number of courses in a number of modules as part of their English study, including Written Comprehension and Expression (WC & E). According to the official syllabi designed for bachelor's degree in foreign languages stated in the ministerial decree No. 500 issued on July 28th, 2014, and in the revision program CPND LLE 2020/2021 (see Appendix 4), WC & E is a fundamental module studied in the form of TDs (tutorials/practical sessions) for three hours per week in two separate sessions of one hour and half. During their first year, students have writing classes in fifteen weeks per semester in which they are introduced to the components and characteristics of sentence and paragraph. They are also taught four basic types of discourse, including compare and /or contrast, cause/effect, argumentative, and prescriptive. The coefficient of this mandatory module is four and the number of credits is six. Concerning evaluation, the final term average of WC & E is obtained by the addition and averaging of the scores of the test and exam. This basic knowledge achieved by these students during this year was sufficient for them to participate in this study. This shared educational background among students guaranteed a level of symmetry in participants' prior learning experiences.

Thirdly, the sample encompassed students with a range of English language proficiency levels. This deliberate inclusion allowed for a comprehensive examination of the impact of automated error corrective feedback across a spectrum of proficiency levels, spanning from lower to higher proficiency. *Purposive selection* of the participants in this study was used for practical reasons, from the 105 students of the three groups, only sixty (60) students were purposefully selected depending on their grades in written expression exam during the first semester of the academic year 2021-2022 which were used by the researcher as classification parameters to classify all the students of G1, G2 and G3 in a descending order of merit starting from the highest, to the average going down to the lowest one. Then, these 60 participants were categorized into three distinct English writing proficiency sub-groups. The first subgroup includes 20 students whose scores ranged from 13/20 to 16/20 who were considered as *advanced* students in writing. The second sub-group includes 20 other students whose scores ranged from 08/20 to 12/20 who were considered as students of *intermediate* level in writing. The third subgroup contains 20 students whose scores lower than 08/20 who were considered as *beginner* writers. This categorization facilitated a nuanced analysis of the impact of automated error corrective feedback across varying levels of proficiency.

To minimize bias and ensure fairness in the study, the 60 students of the three different levels sub-groups were also purposively assigned to two main groups: the experimental group (n=30) contains 10 students from each level (10 advanced, 10 intermediate, 10 beginner), which received automated error corrective feedback, and the control group (n=30) which also includes 10 students from each level in the same way, who did not receive this feedback. Taking this step, the researcher aimed to select the students who seemed to have the different levels of writing proficiency in both groups to ensure that both groups are comparable in terms of writing proficiency.

These three inclusion criteria fall within a process known as *homogeneous sampling*. Homogeneous sampling is a technique where participants share similar characteristics. According to Creswell (2012), this method is common in experimental research because it allows for better control over external variables. By selecting participants with minimal differences in attributes, such as academic performance, researchers can ensure that any variations in results are due to the experiment and not individual differences. The closer the participants are in attributes, the more these attributes are standardized in the study. Kumar (2011) suggests that when both control and experimental groups have similar attributes or abilities, it confirms that any external variables affect both groups similarly. This means that the primary factor being studied, like automated feedback in this context, can fully influence the outcomes, such as students' writing skills and independence. By using the homogeneous sampling method, researchers can ensure that any differences in results between groups are due to the experiment and not pre-existing factors, thus boosting the study's validity and ensuring more precise data.

Concerning the size of the sample, Creswell (2012) posits that a general guideline for establishing the smallest sample size in research is thirty participants for each variable. When it comes to experimental research, Borg and Gall, as referenced by Creswell (2012), believe that a minimum of fifteen participants is necessary for causal-comparative and experimental approaches (p. 102). Considering that, this study focuses on two primary variables - students' writing proficiency and their autonomy in writing - a sample of sixty (60) students was deemed suitable for conducting the research and gathering reliable data.

Table 3*Characteristics of the Study Sample*

Characteristic	Number of Participants
Total Sample Size	60
Age Range (years)	18 - 25
Gender Distribution	
- Male	19
- Female	41
English Proficiency Levels	
- Beginner	20
- Intermediate	20
- Advanced	20
Inclusion Criteria Met	60
Exclusion Criteria Applied	0

This table provides an overview of the characteristics of our study sample, including the total number of participants, age range, gender distribution, English proficiency levels, and whether inclusion criteria were met and applied.

More details about the sampling are provided in the next section, the rational behind involving each sample in each phase is explained, and the sampling techniques adopted for the selection of the sample throughout each phase of the study are also justified.

Data Collection Tools and Procedure

In order to conduct the present study, the researcher opted for two types of data collection approaches (quantitative and qualitative). Thus, due to the different natures of needed data, the researcher developed different research instruments to cope with the requirements of each type.

First, a questionnaire distributed to first year EFL students at Mohamed Cherif Messaadia University (MCMU). Second, a quasi- experiment with non-equivalent pretest-posttest control group design is conducted with the same students' sample of the questionnaire. Finally, a post-experiment semi-structured interview was conducted with a part of students from the students who underwent the experiment.

The Pre-Experiment Questionnaire

Since the first objective of the current study is to gather information about the actual situation of EFL students' writing skill in the English Department of MCMU (Souk Ahras, Algeria), the researcher tried to collect data from EFL students' perspectives, focusing on diagnosing their writing proficiency and autonomy actual levels. To meet this research aim, the researcher has opted for a students' pre-experiment questionnaire as a data gathering tool .

Questionnaires are highly favored in educational research due to their effectiveness in gathering data, as highlighted by Cohen et al. (2000), Dörnyei (2007), and Cohen, Manion & Morrison (2007). Their popularity among researchers can be attributed to several benefits, some of which are pertinent to the current study. Primarily, the anonymity of questionnaires can encourage participants to provide more honest and extensive information. Additionally, they are time-efficient for both researchers and participants, and they can be distributed without the researcher being present. Questionnaires are versatile tools, suitable for both small and large-scale studies, as emphasized by Cohen et al. (2000), Dörnyei (2007), and Cohen, Manion & Morrison (2007).

Given the variety of questionnaire formats, including structured, including structured, semi-structured, and unstructured, researchers must select the type most appropriate for their research. According to Cohen, Manion & Morrison (2007), "the structure and format of a questionnaire align with the sample size. Larger samples might necessitate more structured and quantitative questionnaires, while smaller samples might benefit from a less structured and more qualitative approach" (p. 320). Consequently, due to the limited sample size, the researcher opted for a semi-structured pre-experimental student questionnaire to gather information addressing the initial research questions.

However, in this study, the decision to utilize a semi-structured questionnaire was not only related to the sample size. The open-ended nature of the semi-structured questionnaire was deemed especially appropriate for gleaning qualitative data. Beyond this, semi-structured questionnaires offer a unique advantage in that they allow researchers to gather both quantitative and qualitative information using a singular tool. Supporting this perspective, Cohen, Manion & Morrison (2007) highlighted, "Between the completely open format that essentially invites respondents to 'write freely' and the highly regimented structured questionnaire lies the versatile tool of the semi-structured questionnaire" (p. 321).

Students' Questionnaire Objectives

The pre-experiment structured questionnaire was administered within this research study in order to meet the first purpose of the study which is exploring the current situation of the teaching/learning writing skill of second year Licence students in MCMU (Souk-Ahras). Hence, so as to accomplish the aforementioned aim, the questionnaire is designed by the researcher to attain the following objectives:

1. In-depth understanding EFL students' practices during their writing classes, focusing on the most frequently occurred errors in their writings, the main factors that cause these errors, and the students' used strategies to minimize these errors.

2. Exploring second year EFL students' self correction strategies to enhance their writing proficiency and autonomy. As well as their perceptions of their teachers' and peers' provided feedback
3. Elicit students' perceptions of integrating automated corrective feedback in their writing classes to enhance their writing proficiency and autonomy.

Students' Questionnaire Sample

The students' sample participated in answering the questionnaire's questions were the (30) experimental group students only, i.e, (30) out of the (60) purposefully selected first-year EFL students at the MCMU are invited to participate in the pre-experiment questionnaire.

Description of the Questionnaire

The questionnaire designed for this study is carefully structured and distributed to the participants in a printed form. It opens with introductory instructions which present the aim of the research and put the participants at ease via ensuring the anonymity of their answers. The main aim of the questionnaire is to gain information about the actual situation and the students' real practices of the learning/teaching of writing in EFL classes at MCMU.

It consists of 24 questions of different types (open-ended, close-ended, multiple choice and Likert scale questions) divided into six main sections covering many areas and several key aspects related to the research.

The first section, which comprises three (03) questions, aims to investigate students' overall experience with EFL writing in English at the university level including their initial perspectives on writing, their disposition towards it, in addition to their motivation and perceived importance of writing skills.

The second section also contains three (03) questions. The objective behind this section is to explore the students' writing difficulties, the most frequent types of errors in their assignments, as well as the main factors contributing to the occurrence of these errors.

The third section, which consists of two (02) questions, is devoted to mention the students' strategies to self-correct their errors as an attempt to indicate whether EFL students are aware about their learning strategies, and to what extent they practice self-feedback.

Section four of the questionnaire is composed of three questions (03). It is concerned with students' writing autonomy. Students were asked about their own writing autonomy characteristics ,if they have, their motivation towards learning the writing skill and their confidence in their ability to write in addition to their self directedness in writing as well as their independence from the teacher.

In the fifth section, nine (09) questions are set to tackle second year EFL students' experiences and perceptions to traditional formats of feedback (teacher/peers feedback). It accounts for their teachers'/peer' actual practices of feedback and how they inter-act with it, the main writing aspects addressed/unaddressed by teachers'/peer' feedback, and the extent to which EFL students are dependent on/independent from their writing teachers in accomplishing their writing tasks.

The last four (04) questions included in the sixth section are directed mainly to shed light on EFL students' experiences with/ and perceptions of automated corrective feedback. This section aims to elicit the students' previous experiences, if they exist, with ACF tools in general and CWIF in particular, how they interact with it and how they perceive the integration of these tools in their writing instructional context.

Piloting the Questionnaire

Prior to administering the questionnaire, it was necessary to pilot it with members of the research population. Piloting data collection tools, according to Mertens (1999) and Cohen, Manion, and Morrison (2007), is a fundamental step toward the validation of research instruments. Furthermore, they emphasize the need of piloting all parts of the questionnaire,

from the major concerns such as the clarity of the questions, their appropriateness, and the length of the questionnaire to the smallest matters such as the typeface and paper quality.

Hence, the researcher piloted the questionnaire in two stages with three experienced teachers, and three first year randomly chosen EFL students at the English department of MCMU to ensure its validity and reliability. More precisely, the piloting of the questionnaire targeted at:

- Checking the clarity of the questionnaire's questions,
- Correcting unclear ones,
- Removing unnecessary questions.
- Identifying any items that have been misconstrued.
- Evaluating the length of the questionnaire and the questions, as well as the time required to answer all of the questions.
- Receiving comments on the questionnaire's layout, sectionalization, and appeal.

First, the questionnaire was e-mailed to two seasoned teachers at the English Department of MCMU and also to the supervisor from the Department of Translation in Constantine University, who were given three days period to review the questionnaire and provide their feedback about any inconveniency, ambiguity and redundancy. After three days, the research met with the teachers of at the library of MCMU and discussed with them about their comments. The supervisor sent his valuable remarks about the questionnaire via e-mail. The researcher, in the discussion with the teachers, focused on three main points: the structure of the questionnaire, the convenience of the items and their compatibility with the research objectives.

Second, the adjusted questionnaire was handed to three first year EFL students in the department of English at MCMU, who asked for one-day period to check the questionnaire,

record notes, and answer the questions. The next day the researcher met with the students and discuss with each one individually about their remarks. The points of discussion with the students focused mainly on the clarity of the questions and the length of the questionnaire, i.e. the time they took to answer all the questions.

Indeed, questionnaire piloting assisted the researcher in adjusting the length of the questionnaire and making it less time demanding by omitting some items that the teachers thought unnecessary because they were mentioned indirectly in previous sections of the questionnaire. Furthermore, two students observed that certain open-ended questions were imprecise and confusing since they may be interpreted differently. As a result, these questions were reformulated, and some of them were converted into closed-ended questions.

Administration of the Questionnaire

After it had been piloted and modified in response to teachers' and students' comments, the final version of the questionnaire was released and administered by the researcher. One week before embarking in the experimental stages, the pre-experiment questionnaire was distributed only to the students who were selected to form the experimental group (n30) during an extra written and expression session (1hour and half) programmed by the teacher researcher, only half an hour at the last of the session was devoted to answer the questionnaire. Eventually, all the questionnaires were accomplished and then gathered by the researcher.

The Experiment

Experimentation is highly regarded in the research community due to the validity and reliability of its results, making it one of the most robust research designs. This is why educational researchers often lean towards experimental methods, as they offer considerable control over the study environment and provide flexibility in manipulating the independent variable.

Experiments are valued by researchers because they allow for the identification of clear cause-and-effect relationships, as Abbott & McKinney (2013) noted by emphasizing the ability of experiments to "ascertain theoretical patterns through distinct cause-and-effect connections" (p. 41). Elaborating on the prevalent use of experimental methods across various research domains, Cohen, Manion & Morrison (2007) elucidated the inherent qualities of this approach:

The hallmark of experimental research lies in the researcher's capability to actively control and adjust the conditions influencing the events of interest. This entails introducing a specific change or intervention and gauging its impact, in experimental terms, this means modifying the independent variable and then observing any resultant changes in the dependent variable" (p. 272).

Thus, as the present research explores the impact of using automated feedback within EFL writing instruction (independent variable) on minimizing EFL students writing errors (dependent variable), experimentation is the appropriate research method to identify the causal relationship between the two variables.

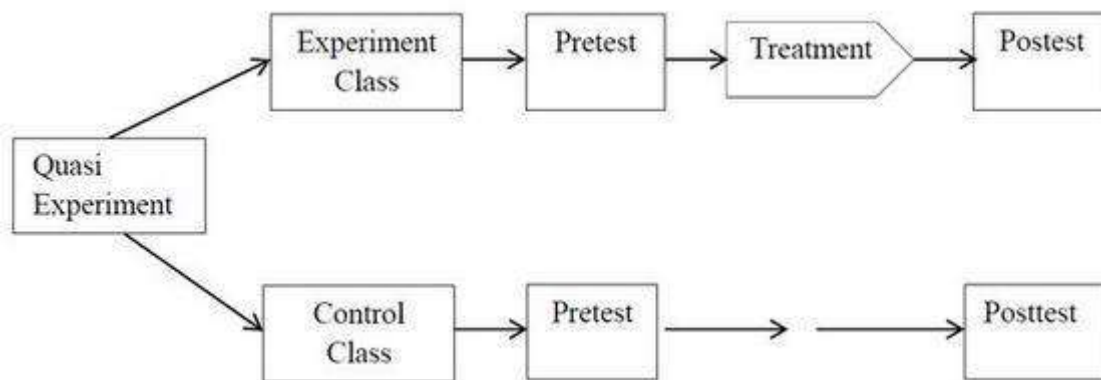
In the realm of educational research, there are primarily three experimental designs: the controlled or true experiment, the natural experiment, and the quasi-experiment, often referred to as the field experiment. The controlled experiment is characterized by its rigorous control over variables, ensuring a clear cause-and-effect relationship. Conversely, the natural

experiment doesn't allow for the isolation and control of variables, making it more observational in nature. The quasi-experiment, on the other hand, strikes a balance; it is conducted in real-world settings rather than controlled laboratory environments, but it still offers the researcher the capability to isolate, control, and manipulate certain variables. Given the three types of experimental designs, the quasi-experiment is the most fitting for this study. This design shares similarities with controlled experiments in its ability to isolate, control, and manipulate variables. However, it differentiates itself by occurring in natural settings, such as a university in the context of this research, instead of the strictly controlled environments of laboratories. Cohen, Manion & Morrison (2007) aptly describe this as moving away from "the artificially constructed world of the laboratory" (p. 274). In the realm of educational research, executing true experiments can be challenging, particularly due to difficulties in randomly assigning participants. Thus, quasi-experiments emerge as a more practical choice. Supporting this notion, Kerlinger (1970) labeled quasi-experimental setups as 'compromise designs'. These designs are especially apt for educational research scenarios where randomizing elements like schools, classrooms, or participants is nearly impossible, as referenced in Cohen, Manion & Morrison (2007). Essentially, there are three different models of quasi-experiments: a) Pre-experimental designs: they include the one group pretest-posttest design, the one group post-tests only design and the post-test only non-equivalent design; b) Pretest-post-test non equivalent group design; and c) One-group time series. The researcher, in the present study, opted for the quasi-experiment with *Non-equivalent Pretest-Posttest Control Group design* to conduct the experiment. This research design was chosen because it has proved its effectiveness in reporting the value of new teaching methods (Cohen, Manion & Morrison, 2007). In the pretest-posttest nonequivalent groups design there is a treatment group that is given a pretest, receives a treatment, and then is given a posttest. But at the same time there is a nonequivalent control group that is given a pretest,

does not receive the treatment, and then is given a posttest. The question, then, is not simply whether participants who receive the treatment improve, but whether they improve *more* than participants who do not receive the treatment. This research design was chosen because it has proved its effectiveness in reporting the value of new teaching methods (Cohen, Manion & Morrison, 2007). This process is summarized in the following schematic representation:

Figure 17

Diagram of the Experimental Design (The Quasi- Experiment with Non-Equivalent Pretest-Posttest Control Group Design)



Hence, this design is adequate for the current study which aims at examining the effect of automated corrective feedback (ACF) on students' writing skills and autonomy improvement.

The Objectives of the Experiment

Given the observed inadequacies in EFL students' writing abilities and their apparent lack of motivation towards mastering EFL writing, this study primarily seeks to bolster their writing proficiency by addressing their most frequent errors. This necessitates an alternative instructional approach to bridge the gap evident in current teaching methodologies. In response, this study introduces automated corrective feedback tools as a remedy to reduce the

prevalent writing errors among EFL students. By employing the non-equivalent pretest-posttest control group quasi-experiment, the researcher aims to:

1. Assess the initial writing proficiency of the non-equivalent groups through a pre-test.
2. Introduce the proposed solution, the automated corrective feedback method, as an in-class intervention.
3. Evaluate the non-equivalent groups' post-intervention writing proficiency using a post-test.
4. Determine the impact of the automated corrective feedback (the independent variable) on the reduction of EFL students' writing errors and their writing autonomy (the dependent variables). This is achieved by comparing the pre-test and post-test results of the non-equivalent groups, thereby unveiling any causal relationships.
5. By comparing post-test outcomes, gauge whether the group exposed to the treatment exhibits greater improvement than the control group. A discernible difference in scores between the two groups would underscore the efficacy of the introduced treatment.

The Sample of the Experiment

The students' sample participated in the quasi-experiment phases were a purposive sample of (60) first year EFL students in the Department of English of MCMU (Souk Ahras, Algeria), aged between 18 and 25 years. This sample represented (44,44%) of the total number of the population (135 students). The inclusion criteria considered three main characteristics: the academic year, the students' prior knowledge, and their writing proficiency level, ensuring representation across various characteristics. Participants were categorized into three writing proficiency groups: beginner, intermediate and advanced, and then they were randomly assigned to two main groups: the experimental group which includes

(30) students of different writing proficiency levels who received automated error corrective feedback and participated in the intervention phase of the experiment, and the control group which also consists of (30) students with different writing proficiency levels who did not receive this type of feedback and did not attend the intervention phase of the experiment. The samples' characteristics and background information are provided in table 3, in the sampling section.

The Quasi-Experimental Procedure

The experiment was structured into three distinct phases: the pre-test, the intervention and the post test phases. These phases were designed to unveil the multifaceted impact of WIF on both writing proficiency and learners' autonomy. It unfolds over the course of six weeks, during which we closely monitor and document the students' interactions with the tool. The aim is to assess how the integration of this automated feedback system impacts their writing skills and autonomy.

The Pre-test. The pre-test serves as the initial benchmark to determine the writing proficiency of the participants before they receive any exposure to the automated error corrective feedback tool. Also it helps create comparable groups and reveals whether the differences between groups are due to some pre-existing factors or not. The data collected from this pre-test are important for confirming the written expression teachers' assumptions about the students' writing ability before embarking on the experiment; and more importantly, they will be used to compare the students' performance before and after the treatment to measure the difference and/or the development.

The pre-test is administered to all the participants at the outset of the study (the 60 students), prior to any exposure to the WIF tool (week 01, session 01). It was carefully designed to reflect the goals of the study, and it is conducted under standardized testing conditions to ensure consistency. The students were asked to write narrative paragraph of

about 80-100 words (see appendix 2). The duration of the pre-test was one hour and half (90 minutes). The narrative genre was selected for the pre-test because it is prescribed in the written expression syllabus of first year licence students (see Appendix 4). Hence, the students engaged in the study would not be outpaced by their counterparts on the other groups because of this six-weeks experiment.

The Intervention. At the heart of this study lies the pivotal intervention (the second phase of the experiment) which marks a critical juncture in our study. This phase revolves around the strategic integration of WIF tool into the routine of writing assignments of the participating students. This intervention seeks to ascertain the transformative potential of WIF tool on their writing prowess.

Just after the session of the pre-test, the researcher started the intervention phase which involved:

An Orientation and Familiarization Stage. (week 01, session 02), where the researcher introduced to the students of the experimental group the concept of automated corrective feedback, its definition, strategies and benefits. The aim of this step is to raise the students' awareness on the usefulness of this type of feedback in enhancing their writing proficiency and autonomy, and to explain to them the nature and aim of the experiment. Also, at this initial phase, the researcher ensured the experiment group students that they could withdraw from the experiment at any time without any negative consequences; and confirmed that their participation in the study would by no means affect their grades in the ordinary tests or exams. The students provided their oral informed consent.

A Training Stage. (week 2, sessions 1 and 2) where they were trained on using WIF program via providing them with detailed guidance on how to access, navigate, and use it effectively. The aim of this phase was to prepare the students to properly use WIF in order to enhance its effectiveness and user-friendliness when they implement in their written

expression sessions. The training phase involved an illustrative activity on how to manipulate the tool. The researcher used a sample essay containing various types of language mistakes to show the students how to deal with them using WIF. By the end of the training phase, each student in the experimental group created a profile on the WIF software.

Implementation of WIF Stage. (week 3- week 6): After the introduction of WIF strategy and the creation of students' profiles on this platform, participants were actively encouraged to incorporate the tool into their regular writing practices. Over the subsequent 4 weeks (8 one hour and half sessions), students in the experimental group were required to compose paragraphs aligned with the curriculum and covered various types, such as narrative and descriptive argumentative paragraphs. Then they were required to submit their first written drafts through WIF tool. The "Write & Improve" tool generated automated feedback on various aspects of writing, including grammar, vocabulary, and coherence. This feedback was provided to students in real-time, enabling them to identify and rectify errors as they composed their assignments until they finish their final draft based on the received automated error corrective feedback.

Control Group Comparisons. It is essential to note that during this phase the control group, comprising an equal number of participants (n=30) followed the same curriculum (the standard written and expression curriculum for first year) and assignment procedures as the intervention group but did not receive the WIF. They participated in their writing sessions in normal and habitual conditions depending as usual from their teachers' feedback to revise and evaluate their writings.

This control group served as a comparison condition against which the impact of the automated feedback intervention could be evaluated. By comparing the writing proficiency and autonomy of the intervention group with those of the control group, the study aimed to

determine whether the use of the "Write & Improve" tool led to significant improvements in writing skills and autonomy compared to traditional teacher-written feedback.

In summary, the automated error corrective feedback intervention was thoughtfully designed to address writing challenges, enhance writing proficiency, promote learner autonomy, and facilitate a comparative analysis with a control group. Its implementation was integrated into the academic year, with participants receiving immediate feedback and opportunities for self-correction. This approach allowed for a comprehensive examination of the intervention's impact on EFL learners' writing skills and autonomy within the research context.

The Post-test. After the four-week intervention phase, all the students (n=60) passed a post-test in which they were assigned to write a narrative descriptive paragraph respecting the language form and the text organization appropriate for the purpose of the paragraph (see appendix 3). The students performed the test, which lasted for one hour and half (90 minutes), individually without using neither teacher feedback nor WIF. The post-test is designed to be comparable to that in the pre-test, enabling a direct comparison of writing proficiency before and after the intervention. It ensures that the same writing skills are being assessed.

The data collected from the post-test were used, first to assess the students' writing proficiency after the intervention phase of all the students of both groups (experimental and control groups students). Second, they were used to make several important comparisons contributing valuable insights to the study's overarching goals.

Comparing the experimental group *post-test* results with their baseline data obtained from the *pre-test* allowed us to measure any improvements in the students' writing performance and autonomy between *the two time points*, hence, to assess the effectiveness of the automated feedback tool in enhancing writing skills and autonomy among EFL learners. Additionally, comparing the experimental group *post test* results with the control group *post*

test results provided us with empirical evidence on the impact of WIF versus the teacher feedback on the participants' writing abilities.

In summary, these three phases provide a structured framework for our research, enabling us to explore the impact of automated error corrective feedback on EFL learners' writing skills and autonomy. The combination of assessments, interventions, and data collection allow us to draw meaningful conclusions about the potential benefits of this technology in the context of English language learning.

The following table offers a visual representation of the intervention phases, timeline, and the progression of activities, aiding in better understanding how the WIF tool was integrated into the study over the course of six weeks.

Table 4

Procedures of the Experiment

Phase	Stage	Date	Procedures/Aims
Pre-test Phase	Pre-experimental stage	Week 1 Session 1	<ul style="list-style-type: none"> - To provide a baseline understanding of the participants' initial writing proficiency. - Experimental group and control group students were pre-tested (n=60). - participants were asked to write a descriptive narrative essay
Intervention phase	<i>Orientation and Familiarization Stage</i>	Week 1 Session 2	<ul style="list-style-type: none"> - To explain the aim of the intervention via introducing CWIF -Only experimental group students were involved (n=30).
	<i>Training Stage</i>	Week 2 Sessions 1 and 2	<ul style="list-style-type: none"> - To train the participants on properly use the CWIF tool. - Only experimental group students were involved (n=30). -An illustrative activity took place. - Creation of students' profiles on CWIF platform.
	<i>Implementation of CWIF Stage</i>	Week 3 to Week 6	<ul style="list-style-type: none"> - CWIF tool integration/ continued use and adaptation. -Writing assignments submission through CWIF tool. -Automated feedback provision. -Final drafts collection.

Post-test Phase	Post-experimental Stage	Week 6 Session 2	<ul style="list-style-type: none"> - To gauge any improvements/differences after the intervention phase. - Experimental group and control group students were pre-tested (n=60). - participants were asked to write a descriptive narrative essay.
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The Interview

A semi-structured interview was conducted with only ten (10) students from the experimental group. Although interviews can be used as a major data collecting technique to solve a research topic, they can also be utilized as an auxiliary checking tool to triangulate data obtained by another data collection tool (McDonough & Masuhara., 1997). Accordingly, Cohen, Manion, and Morrison (2007) asserted that employing interviews in research "marks a move away from seeing human subjects as simply manipulating and somehow external to individuals" (p. 349). As a result, interviews are a popular data collection approach in educational research because they are adaptable and allow for the use of multiple sensory channels: "verbal, nonverbal, spoken, and heard" (Cohen, Manion, and Morrison, 2007, p. 349).

In addition, interviewing students and reporting their opinions and attitudes of how they learn is critical and has had a significant impact on educational research because, until the twentieth century, the majority of educational research did not take students' attitudes, impressions, and views into account (Tierney and Dilley, 2001).

In this study, the interview was used to augment and provide in-depth insights to the data acquired by the preliminary instrument, which are the writing tests. The researcher chose semi-structured interviews, which are interviews "with a given schedules and open-ended questions" and are commonly used in academic studies to "gather data on the more tangible aspects of the school's culture, e.g. standards, hypotheses, opinions, goals, challenges" (Cohen, Manion, & Morrison 2007, p 97). As a result, semi-structured interviews were used

in the present research due to the variety of benefits of open-ended questions such as flexibility, the ability to probe in order to go into greater depth or clarify any misunderstanding, encouraging cooperation, and assisting the researcher in making a valid assessment of what the respondents truly believe (ibid, 2007).

Moreover, semi-structured interviews allow a participant to freely express his or her thoughts or views without the interviewer interfering or directing the interviewee to answer the question in a specific way; thus, the researcher used semi-structured interviews to allow the teacher and students who participated in the study to freely convey their perspectives toward automated feedback based writing instruction technique.

Objectives of the Interview

The post-experiment semi-structured interview was conducted within this study in order to achieve the last aim of the study which is accounting for the students' attitudes towards the integration of the automated corrective feedback tool " Write and Improve Feedback" (WIF) within EFL e writing course. Hence, in order to achieve this aim, the interview was conducted by the researcher to fulfill the following objectives:

1. To have a deep insight on the students' experience with the use of WIF.
2. To elicit participants' attitudes towards the implementation of WIF in the writing courses.
4. To account for the main difficulties features that the participants might have faced during the implementation of WIF.
5. To review the CWIF application in terms the quality of feedback provided, the type of errors identified by it, and ways to improve WIF.
6. To talk about the main students' aspects of autonomy affected by WIF.

Participants of the interview

The students who were interviewed were chosen at random by the researcher from among the thirty (30) students who were subjected to the experiment. They were chosen to

participate in the interview based on their post-test evaluation results. Accordingly, the researcher chose the researcher purposively chose ten (10) first students: three (03) students with advanced writing abilities, three (03) average students, and four (04) students with weak writing abilities. This selection strategy was justified by the researcher's aim to collect in-depth qualitative data from students who could have different views on ACF based on their experience. This would enable the researcher to get deeper understanding of the impact of ACF on students' writing competence and their attitude towards it.

Purposive sampling was chosen by the researcher because it allows him/her to "handpick cases to be included in the sample on the basis of their judgment of their typicality or possession of the particular characteristic being sought"; it also allows him/her to "build up a sample that is satisfactory to their specific needs" (Cohen, Manion, & Morrison, 2007, p. 114-115).

Nevertheless, despite the fact that its results are non-generalizable and it is considered "deliberately and unashamedly selective," the researcher relied on this sampling strategy to meet a specific research purpose, which is accounting for the perceptions of students of various levels (high, average, and low) towards the use of WIF, the difficulties that they encounter when using it, and their assessment of the application's positive and negative features.

Description of the Interview

The post-experiment students' interview contains (13) questions (see appendix 5). Questions from (01) to (06) were devoted to discuss the student interviewees about their experience with WIF technique and the extent to which they benefited from it. They were asked about their attitudes towards the implementation of automated feedback tools in their writing process and how did they find its usefulness in terms of the areas of improvements/changes in their writings and the treated/untreated types of errors.

Questions (07) and (08), tackled with students' view about the similar and different features between teacher and automated feedback.

In the questions from (09) to (12) the students were asked to give their review about the WIF application, specifically, they were asked about its easy/ difficult features and ways to ameliorated these challenging features.

Question (13) is mainly devoted to the impact of WIF use on the students' autonomy in terms of their writing motivation, self-confidence, self directedness, self feedback and their dependence/independence from the teacher.

Administration of the Interview

The students' interview was personally conducted by the researcher. It took place in the English Department of MCMU and was conducted right after the post-test. Each student was interviewed individually in a quiet room and all the interviews were recorded; the interviews lasted for 20 to 30 minutes and were all conducted in English. Conforming to the research ethics, the consent of the participants was obtained concerning the recording of the interview and the reporting of the findings.

Classroom Observation

Autonomy is an affective variable that cannot be assessed easily, described, or expressed objectively through questionnaires or interviews. Therefore, in addition to the students' pre-experiment questionnaire and the teachers' and students' post experiment interviews, a classroom observation has been used in this research to support the obtained results. Classroom observation is considered as the best method to collect data about students' interaction, behavior or the personality characteristics of an individual. It has always been considered as one of the most important data collection tools in qualitative research.

Classroom observations were a crucial component of this research study, providing valuable insights into how students interacted with automated error corrective feedback

(ACF) during writing tasks. The observations aimed to capture students' behaviors, attitudes, and responses in real-time classroom settings, offering a more comprehensive understanding of the impact of ACF on their writing processes. The following outlines the classroom observation procedure employed in this study:

The primary objective of classroom observations was to closely examine students' engagement with ACF during writing activities and to document their interactions with this technology-enabled tool. Observations sought to answer questions related to how students incorporated ACF into their writing routines, the extent to which they relied on it for error correction, and any visible changes in their autonomy and motivation as a result of its use.

For each classroom observation session, a group of 10 students from the experimental group will be selected. This number was determined to strike a balance between representativeness and the practicality of data collection, ensuring that insights are captured effectively. The classroom observations will be conducted at multiple points during the study to account for variations in student interactions with ACF over time. A total of five observation sessions were conducted, allowing for a comprehensive examination of students' experiences throughout the study. Each classroom observation session is expected to last for approximately one hour. This duration will provide sufficient time to observe students' interactions with ACF during their writing tasks and any subsequent actions they take based on the feedback received.

To facilitate systematic observations, the researcher developed an observation checklist. This checklist contained specific items and behaviors to be observed during each classroom session. Key elements of the observation instrument included:

1- Frequency of ACF Use: How often students accessed and utilized ACF during the writing process.

2-Types of Errors Addressed: Which types of writing errors students focused on with the help of ACF.

3-Response to ACF Feedback: How students reacted to ACF generated suggestions and corrections.

4-Level of Autonomy: The degree to which students exhibited self-directedness in using ACF and making revisions independently.

5-Influence on Motivation: Any observable changes in students' motivation to write in English as influenced by ACF.

Classroom observations were conducted during specific writing sessions within the experimental group, where ACF was integrated into the writing instruction. These sessions were selected strategically to capture diverse types of writing tasks over the course of the experiment. It was important to observe students during different writing scenarios to gain a comprehensive view of their interactions with ACF.

The researcher responsible for conducting the observations received training on the use of the observation instrument. Training included understanding the purpose of the observations, becoming familiar with the items on the checklist, and practicing observation techniques to ensure consistency and accuracy in data collection.

Classroom Observation Procedure

Prior to conducting classroom observations, the students were informed about the purpose of the observations, the use of the checklist. Observations were unobtrusive, meaning that the researcher did not interfere with the ongoing classroom activities. The researcher discreetly observed students' interactions with ACF while minimizing any disruptions to the natural flow of the class. During each observation session, the researcher meticulously documented students' behaviors and responses in accordance with the items on the observation checklist. This documentation included notes on the frequency and nature of ACF

use, observed types of errors addressed, students' reactions to ACF-generated feedback, and any visible changes in autonomy and motivation.

Observations were conducted over five (05) classroom sessions throughout the experiment. The total duration of observations allowed for a comprehensive understanding of how students' interactions with ACF evolved over time.

Ethical considerations were of utmost importance during classroom observations. The researcher ensured that students' privacy and comfort were respected, and their consent was obtained. Any identifying information was kept confidential, and the recordings were securely stored and used only for research purposes.

Classroom Observation Data Analysis

Data from classroom observations, including written notes, were analyzed qualitatively. The observation checklist items served as a framework for categorizing and interpreting the observed behaviors and responses. Thematic analysis was applied to identify recurring themes and patterns in students' interactions with ACF, as well as any changes in their autonomy and motivation.

The findings from classroom observations were reported in the research study to complement the quantitative and qualitative data from other sources. These findings provided valuable insights into the practical implementation of ACF in the classroom and how it influenced students' writing processes.

In summary, classroom observations in this study served as a valuable tool for capturing real-time student behaviors and attitudes toward automated error corrective feedback. They offered a nuanced view of how students incorporated ACF into their writing routines and its impact on their autonomy and motivation in writing. The systematic observation procedure, combined with ethical considerations, contributed to the richness and reliability of the research findings.

Data Processing and Data Analysis

Data Analysis

Data analysis in this study combines both statistical and descriptive techniques to comprehensively address the research questions and objectives. This section provides a detailed overview of the methods employed for data analysis, how the data is organized and interpreted, the software or tools used, and considerations related to potential limitations and threats to validity in the data analysis process.

Statistical Techniques

Descriptive Statistics. Descriptive statistics, such as mean, standard deviation, median, and range, are used to summarize and present key characteristics of the quantitative data collected from pre-test and post-test assessments. These statistics provide an initial understanding of the distribution of writing proficiency scores among participants.

Paired-Samples t-Test. The primary statistical technique employed is the paired-samples t-test. This test is used to compare the mean writing proficiency scores of participants between the pre-test and post-test phases. It determines whether there is a statistically significant difference in writing proficiency following WIF intervention.

Unpaired t-test with Effect Size Calculation. The unpaired t-test helps to determine if there is a statistically significant difference between the two groups at each phase. This provides information about if the students who received WIF significantly loose numbers of errors than those who did not. Effect size measures, Cohen's d, are calculated to quantify the magnitude of the difference between pre-test and post-test scores. This provides context for the statistical significance observed in the paired-samples t-test.

Wilcoxon Signed-Rank Test: was used to compare students' levels from the pretest to the post-test after the implementation of WIF.

Descriptive Techniques

Thematic Analysis. Qualitative data from questionnaires, interviews, and observations are subjected to thematic analysis. This involves identifying, analyzing, and reporting themes or patterns within the narrative responses of participants. Thematic analysis helps uncover insights into participants' perceptions, attitudes, and experiences related to writing and the use of automated error corrective feedback.

Data Organization, Coding, and Interpretation

Data Organization. Quantitative data from pre-test and post-test assessments are organized in a dataset that includes participants' unique identifiers, writing proficiency scores, and demographic information. Qualitative data from questionnaires, interviews, and observations are systematically organized by participant and research instrument.

Coding. Qualitative data are coded using a systematic approach. Initially, codes are developed based on the research questions and objectives. These codes are applied to segments of text that relate to specific themes or concepts. The coding process is iterative, allowing for refinement and the identification of emerging themes.

Interpretation. Interpretation involves examining the coded qualitative data and drawing meaningful insights. Patterns, commonalities, and variations in participants' responses are identified and discussed in the context of the research questions. Qualitative findings are used to provide a deeper understanding of participants' perceptions, attitudes, and experiences.

Data Analysis Tools

Statistical Software

Statistical software packages, such as SPSS (Statistical Package for the Social Sciences), and Excel, are used for quantitative data analysis, including the paired-samples t-test and effect size calculations.

Limitations and Threats to Validity

Selection Bias

There may be limitations related to the selection of participants, as the study's sample is drawn from a specific population of first-year LMD English students at the University of Souk Ahras. Generalization of findings to other contexts may be limited.

Self-Report Bias

Data collected through questionnaires and interviews may be subject to self-report bias, as participants may provide responses they believe are socially desirable. Efforts are made to mitigate this bias through anonymous data collection and assurances of confidentiality.

Control Group Differences

Differences between the intervention and control groups may exist that were not controlled in the study. These differences could potentially confound the interpretation of the intervention's effects.

Limited External Validity

The study's findings may have limited external validity, as they are specific to the context of the University of Souk-Ahras and may not be generalized to other educational settings.

Measurement Validity

Ensuring the validity of the pre-test and post-test assessments and questionnaires is essential to the study's overall validity. Steps are taken to select valid and reliable instruments and to provide clear instructions to participants.

Conclusion

In summary, the data analysis in this study combines quantitative techniques, including descriptive statistics and the paired-samples t-test, with qualitative techniques such as thematic analysis. Data are systematically organized, coded, and interpreted to address the research questions comprehensively. The use of statistical and qualitative software tools enhances the efficiency and rigor of the analysis process. However, potential limitations and threats to validity, such as selection bias and control group differences, are acknowledged and considered in the interpretation of results.

Chapter Five

Chapter Five: Research Results and Interpretations

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Chapter Five: Results' Analysis, Interpretation and Discussion

The previous chapters have laid the groundwork by outlining the research context, objectives, methodology, and the tools employed to collect both quantitative and qualitative data. In this chapter the researcher transitions from the process of data collection to the critical phase of data presentation, analysis, interpretation and discussion. The primary purpose of this chapter is twofold: first, to present the research results meticulously and comprehensively, and second, to interpret these findings within the context of the research questions and hypotheses. By doing so, this chapter illuminates the intricacies of ACF implementation in EFL writing instruction and its repercussions on students' writing skills and autonomy.

First, in the first section of this chapter, the researcher presents and analyses the results derived from the pre-experiment questionnaire, which was conducted primarily to investigate the overall context of EFL teaching and learning the writing skill of first year students in the English Department of Mohamed Cherif Messadia University, Souk Ahras (Algeria). Additionally, it accounts for these students' experiences with EFL writing, their main committed errors, the factors leading to these errors, and their perceptions to teachers/automated feedback and its impact on their writing and autonomy development.

Subsequently, the researcher in the second section delves into the results stemming from the quasi-experimental design via presenting and comparing the findings of the findings of the writing tests (pre-test and post-test) which were designed to examine the impact of "Write & Improve" feedback on EFL students' writing proficiency and autonomy development, the types of errors addressed by the tool, the accuracy and effectiveness of WIF feedback, comparisons with teacher-provided feedback, and the tool's effect on writing autonomy.

After that, in the third section, data obtained from the classroom observation were presented and interpreted focusing on

Finally, section four analyses the findings of the post-experiment interview which aimed to at providing in depth insights about the students' experience with WIF, its effects on their writing skills and autonomy, and exploring the students' attitudes towards the implementation of WFI in the writing classes.

More details about these data collection tools are previously presented in chapter four (Research Methodology and Design), which was mainly concerned with a comprehensive presentation of the description of these data collection tools' samples, objectives and procedures.

Pre-Experiment Questionnaire Findings

The pre-experiment questionnaire was devoted first year EFL students at the Department of English of MCMU. It was designed with the aim to gather both quantitative and qualitative data about these students' perspectives on writing skills, autonomy, and their experiences with writing classes and teachers/automated feedback. The questionnaire was administered to the experimental group (n=30) of the study participants, it provided valuable insights into their initial perceptions and practices related to writing instruction, as follows:

Analysis and Interpretation of the Questionnaire Findings

Section 1: Students Experience with Writing in English

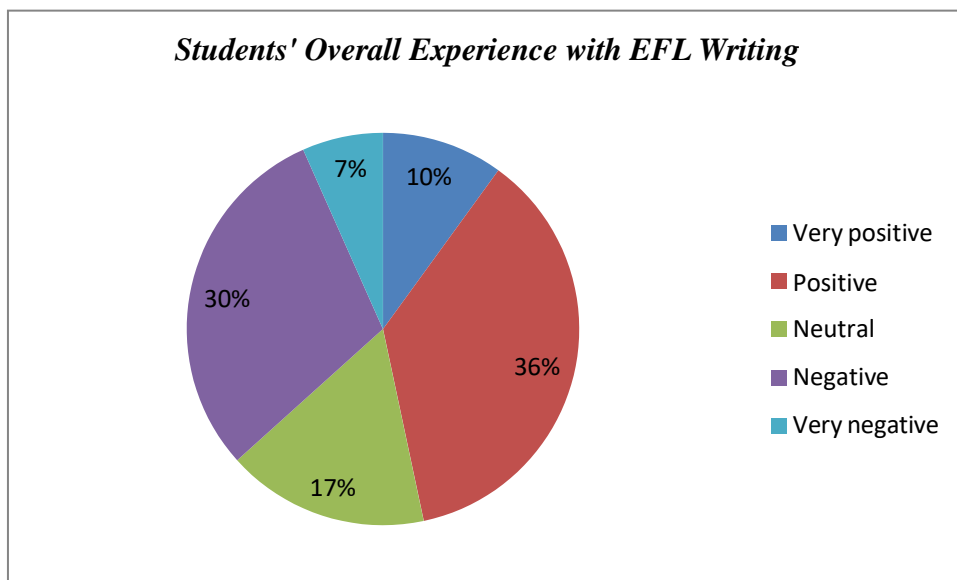
So as to explore the context of teaching the writing skill to EFL students at MCMU, this section aims to investigate students' overall experience with EFL writing in English at the university level including their initial perspectives on writing, their disposition towards it, in addition to their motivation and perceived importance of writing skills.

Question 01: How would you describe your overall experience with writing in English?

This question aims to gauge participants' general view to their experience with writing in English. The responses were diverse, with participants falling into various categories as shown in figure (15) below:

Figure 18

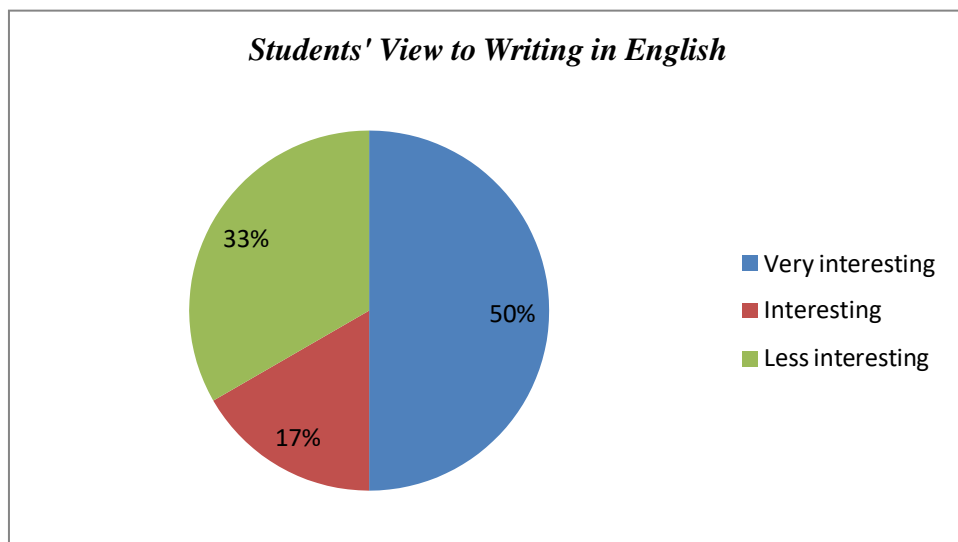
Students' Overall Experience with Writing in English



According to the data represented in the figure above, the largest group, (36%) of participants, had “*Positive*” view of their writing in English experience and (10%) of participants had “*Very positive*” view. This suggests that a significant portion of the students (46%) had a favorable outlook on their experience with writing in English. On the other hand, a percentage (30%) had a “*Negative*” perception, and (7%) had a “*Very Negative*” perception, indicating that many other students (37%) found writing in English to be a challenging or un-enjoyable task. The “*Neutral*” category, comprising (17%) of participants, indicates that there is a middle ground with students who not strongly lean towards either a positive or negative view.

Question 02: How do you find writing in English?

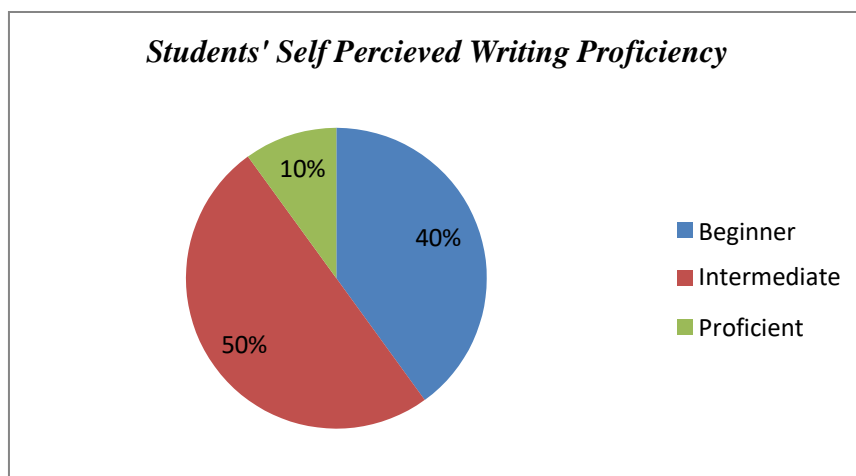
This question investigates the participants’ view to writing in English. The findings from this question are presented in figure (16) bellow:

Figure 19*Students View to Writing in English*

The majority of participants (50%) found writing to be "*Interesting*" and (17%) found it "*Very Interesting*," which indicates a positive attitude towards this skill. Another important portion of participants of (33%) found it "*Less interesting*," This distribution suggests that on the one hand, a substantial number of students (67%) acknowledged the importance of writing skills in their academic and future professional endeavors, emphasizing its significance in English language learning, and on the other hand, a significant percentage of students (33%) suggested that they may not be aware about the importance of writing or they may not enthusiastic about writing in English.

Question 03: How do you perceive your writing skill?

This question aims to understand students' self-perceived proficiency in writing in English at the outset of the experiment. Students' answers are displayed in figure (17) bellow:

Figure 20*Students' Self-perceived Writing Proficiency*

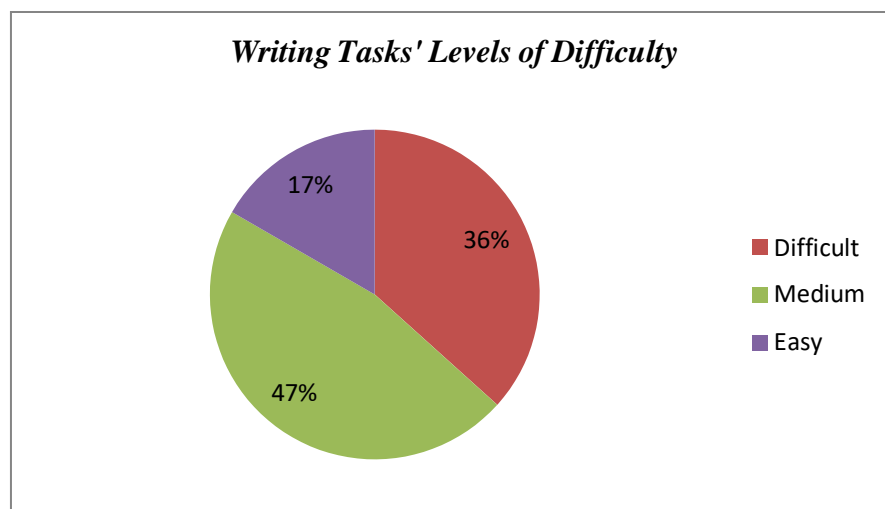
While 50% (15 out of 30) of the participants assessed themselves as "*Intermediate*" writers, the results show a proportion of 40% (12 out of 30) considered themselves "*beginners*," and only 10% (3 out of 30) regarded themselves as "*Proficient*" writers. This distribution indicates a diverse range of self-assessed writing skills among the participants. However, the majority of the students perceived their writing level as average. For the students who assess themselves as intermediate and beginner students in writing, this suggests that they may be aware of the areas in need for improvement in their writing skills.

Section 2: Students' writing difficulties and their most frequent errors

The objective behind this section is to explore the students' writing difficulties, the most frequent types of errors in their assignments, as well as the main factors contributing to the occurrence of these errors.

Question 04: How do you find EFL writing tasks?

The responses to this question indicate the participants' perceptions of the difficulty level of EFL writing tasks. The findings from this question are presented in figure (18) bellow:

Figure 21*Writing Tasks' Level of Difficulty*

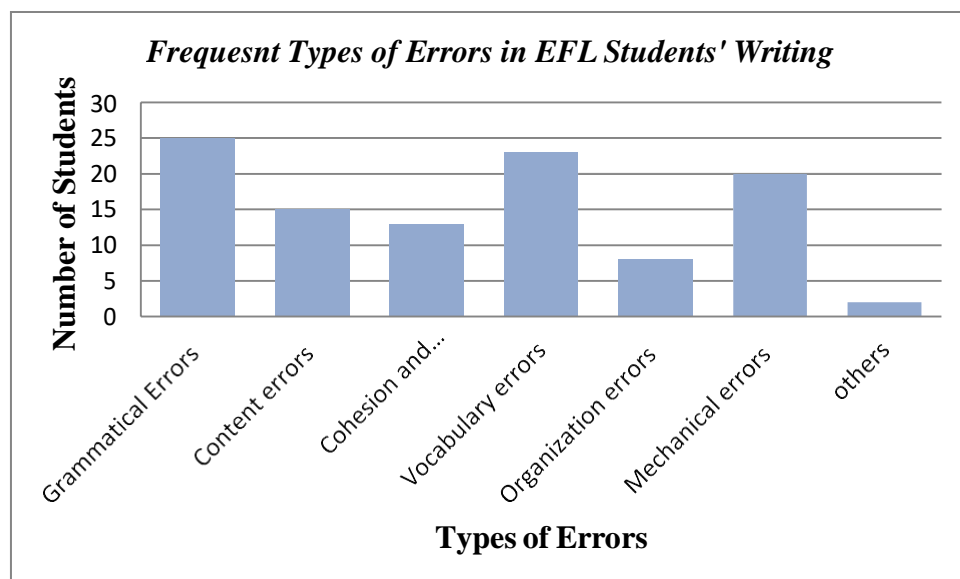
Among the participants, 11 (36%) found EFL writing tasks to be "*Difficult*." This suggests that a significant portion of the students in the sample perceive EFL writing tasks as challenging, possibly due to various linguistic and structural complexities.

The majority of participants, 14 (47%), indicated that they find EFL writing tasks to be of "*Medium*" difficulty. This response category represents the middle ground, suggesting that a substantial number of students consider EFL writing tasks to be moderately challenging, but not overwhelmingly so.

A smaller proportion of participants, 5 (17%), categorized EFL writing tasks as "*Easy*." This group of students perceives EFL writing tasks as relatively straightforward, indicating a higher level of confidence and comfort with writing in English.

Question 05: What type of errors that frequently appears in your writings?

This question aims to identify the most common types of errors that frequently appear in the participants' writings. The responses provide insights into the specific challenges students face in their writing.

Figure 22*Frequent Errors in EFL Students' Writing*

A majority of participants, 25 out of 30 (83%), identified "*Grammatical*" errors as the most frequent type in their writings. This suggests that issues related to grammar, such as verb tense, subject-verb agreement, word order, prepositions, articles..., are prevalent challenges for these students.

Also, a significant number of participants, 23 out of 30 (77%), mentioned "*Vocabulary (Word Choice)*" errors as common. This indicates that students often struggle with selecting the right words and expressions to convey their ideas accurately.

Mechanical errors were cited by 20 out of 30 (67%) participants. These errors may include issues with punctuation, spelling, capitalization and indentation. These types of errors can impede comprehension and negatively affect the overall clarity and quality of the written work.

Content-related errors were noted by 15 out of 30 (50%) participants. These errors may involve deviation from the subject, incompatibility between the content of the written text and the targeted audience and inconsistency of the writing purpose...etc.

Cohesion and coherence issues were mentioned by 13 out of 30 (43%) participants. These errors affect the flow and logical progression of ideas within a text and this negatively impacts the readability and comprehension of the students' written pieces.

Organization errors were identified by 8 out of 30 (27%) participants. This category pertains to difficulties related to outlining a clear plan and an appropriate structure of sentences to obtain unity and coherence of the written text for easier understanding of the written text.

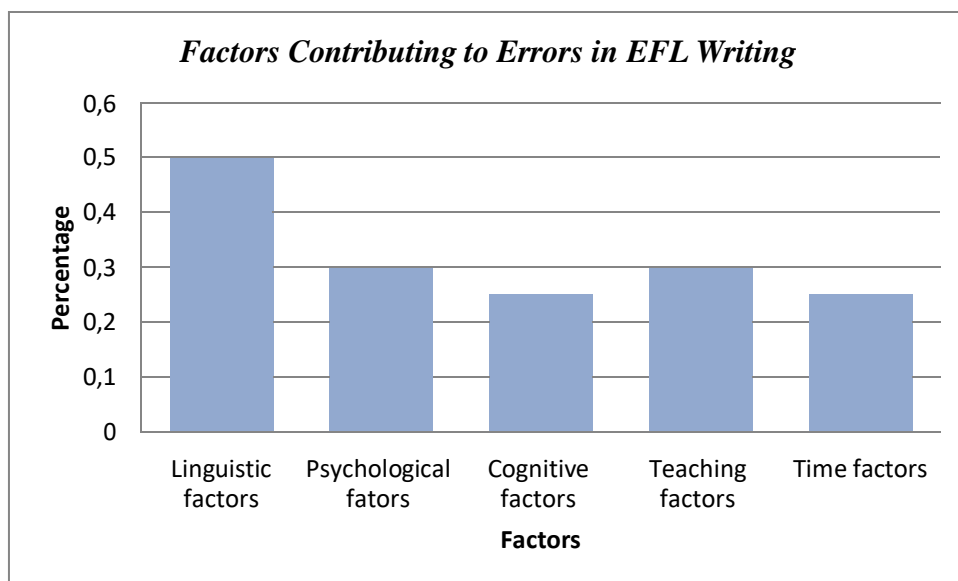
Two (2 out of 30) of the participants (7%) mentioned "*Others*," indicating that they experience additional error types not covered by the provided categories.

In summary, this analysis provides a comprehensive overview of the types of errors that frequently appear in the students' writings. Grammatical errors, vocabulary issues and mechanical errors emerged as the most common types of errors among participants, followed by content related errors, cohesion and coherence errors, and organization errors respectively. Understanding these specific error patterns is crucial for tailoring instructional interventions, including the integration of automated error corrective feedback, to address students' writing needs effectively.

Question 06: What are the main factors contributing to these errors?

- Linguistic factors (problems related to language use)
- Psychological factors (lack of motivation, lack of confidence, anxiety, ...)
- Cognitive factors (misunderstanding the writing requirements)
- Teaching factors (teaching approaches, strategies and materials)
- Time factors (lack of time)

This question aims to identify the main factors contributing to the emergence of different types of errors in participants' writings. Students expressed different factors ranging between linguistic, psychological and cognitive among others. The findings are presented in the figure below:

Figure 23*Factors Contributing to Errors in EFL Writing*

The responses of students indicate that *linguistic factors* related to language use were the most commonly cited contributors to errors, with 50% of participants mentioning them. This suggests that language-related issues, such as grammar and vocabulary, play a significant role in writing difficulties.

Psychological factors, including a lack of motivation, confidence, and anxiety, were mentioned by (30%) of participants. This highlights the importance of addressing learners' psychological aspects to enhance writing skills.

Teaching factors, including teaching approaches, strategies, and materials, were cited by (30%) of participants. This indicates that the teaching environment and methods also influence writing outcomes.

Cognitive factors, such as misunderstanding writing requirements, were identified by (25%) of participants. This finding underscores the need for clear guidance and instructions in writing tasks.

Time factors, specifically a lack of time, were mentioned by (25%) of participants. Time constraints can impact the writing process, the reception of feedback and the ability to revise and correct errors.

Overall, these findings emphasize the multifaceted nature of factors contributing to writing errors, highlighting the importance of addressing linguistic, psychological, teaching, cognitive and time-related aspects, in writing instruction.

Section 3: Students' Strategies to Self-correct Their Errors.

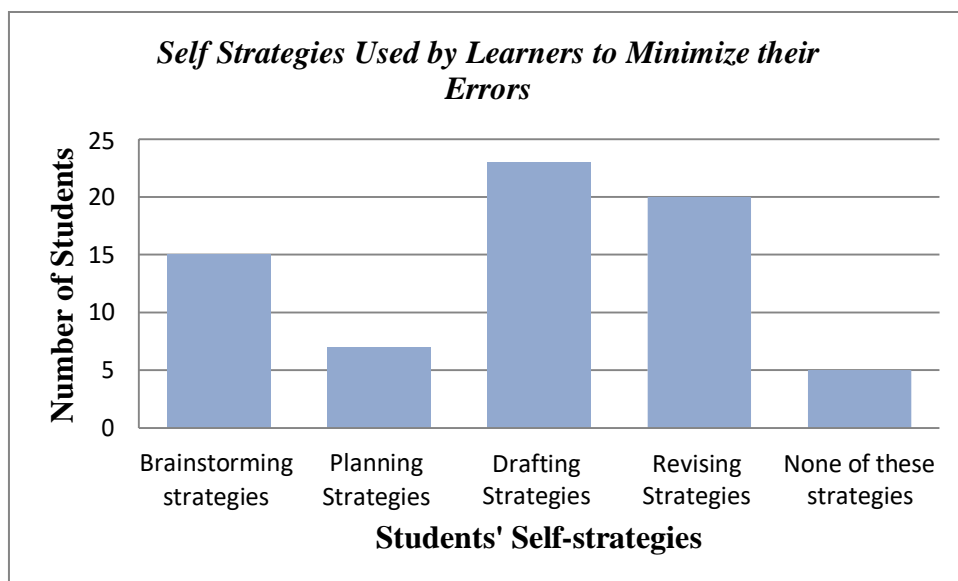
This section is devoted to mention the students' strategies minimize their errors as an attempt to indicate whether EFL students are aware about their learning strategies, and to what extent they practise self feedback to correct their errors.

Question 07: Which of the following strategies you use to self- correct and minimize your writing errors?

- I think about the requirements of writing tasks and then set a writing goal before I actually write (brainstorming strategies)
- I plan before I write (planning strategies)
- I make drafts when doing writing tasks (drafting strategies)
- Even the teacher does no ask me to, I proofread and revise m writing drafts. (Revising strategies)
- I do not use any of these strategies.
- Others

Figure 24

Self-strategies Used by Students to minimize their errors



Drafting strategies emerged as the most commonly used self-correction strategy with (23 out of 30) participants (77%), signifying that they create drafts when working on writing tasks. Drafting involves producing a preliminary version of a text, which can be further refined and revised.

Revising strategies were reported by 20 participants (67%) indicating that they engage in revision as a means to improve their writing. Revision involves reviewing and making changes to one's written work to enhance its quality.

Brainstorming strategies were employed by 15 participants (50%), indicating that they think about the requirements of a writing task and set writing goals before they begin the actual writing process. Brainstorming is an essential pre-writing technique that helps generate ideas and structure for a composition.

Planning strategies were mentioned by 7 participants (23%), suggesting that they plan their writing before starting the actual composition. Planning often involves outlining the structure and content of the piece.

A group of participants of 5 individuals with a proportion of (17%) stated that they do not use any of these strategies, implying that they may rely on other methods or may not have established a deliberate self-correction process.

Additionally, none of the participants provided their unique self-correction strategies in this scenario.

These findings reflect the diversity of strategies employed by EFL learners to enhance the quality of their writing, with drafting and revision being the most prevalent strategies. The participants' preferences for particular strategies may vary based on their individual writing processes and experiences.

Question 08: What are your self-directed practices to improve your writing skill?

The question 8 highlights a range of practices that can be employed by participants to enhance their writing skills. The findings are reported in table (06) below:

Table 05

Students' Self- direction Practices to Improve their Writing

Students' Own Practices to Improve their Writing	Number of Participants	Percentage (%)
- Look for chances to practice writing outside the classroom	03	10%
- Look for ideas for writing outside the class	03	10%
- Even when not under supervision, urge oneself to learn writing	02	07%
- Select examples of good writing to read	44	13%
- Use reference tools like dictionaries and grammar books when writing	10	33%
- Use computer-based tools (e-dictionaries, Google Translate, etc	07	23%
- Do not use any of these practices	17	57%
- Others (Specify)	00	00%

It is disappointing to note that a significant number of participants, 17 (57%) reported disengaging in any form of these practices to improve their writing. For the minority of the rest students 13 (43%) who declared their engagement in some of these practices, this indicates that they acquire a proactive approach to skill development.

The most common students' self-improvement practices involve their reliance on "*the use of reference tools like dictionaries and grammar books when writing*" by 10 (33%) of the students, followed by the use of *computer-based tools (e-dictionaries, Google Translate, etc.)* by 07 (23%) of the students, reflecting their acceptance of the integration of Information and Communication Technologies (ICTs) into their writing processes.

Additionally, selecting examples of good writing to read (13%), "*seeking opportunities to practice writing outside the classroom and searching for external ideas are the common practices*" used by a very small number of students (10% and 7% respectively), in an attempt to ameliorate their writing. These practices align with established pedagogical principles that emphasize the importance of exposure to diverse texts and continuous practice for skill development.

Overall, the findings suggest that the participants are not motivated and are not resourceful in their efforts to improve their writing skills, which provides valuable context for evaluating the potential impact of automated error corrective feedback on their motivation and self-directed practices.

Section 4: Students' Writing Autonomy

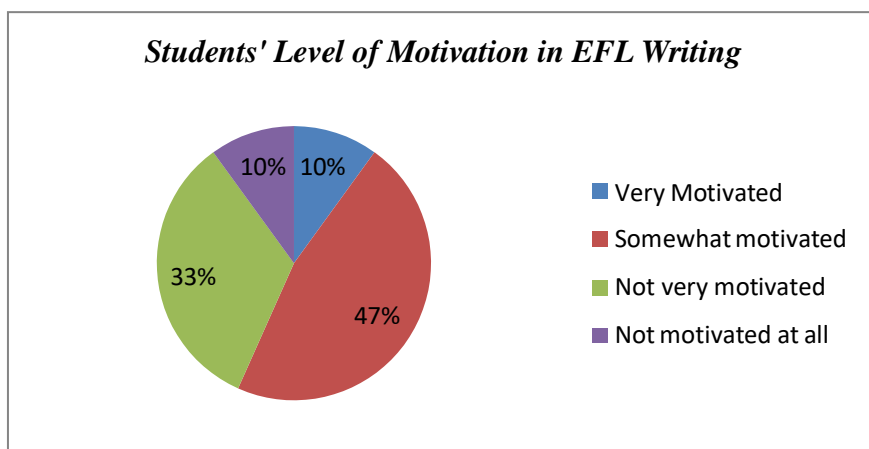
Section four is concerned with students' writing autonomy. Students were asked about their own writing autonomy characteristics, their motivation towards learning the writing skill and their confidence in their ability to write in addition to their self directedness in writing as well their independence from the teacher.

Question 09: How motivated are you to write in English at the beginning of this academic year?

The results indicate a diverse range of motivation levels among the participants at the beginning of the academic year in terms of writing in English as reported in figure (22) below:

Figure 25

Motivation Level of Students at the Beginning of the Year



A small proportion of the participants, 10% (3 out of 30), reported feeling “Very motivated” to write in English. This suggests that these students were enthusiastic about engaging in writing tasks in the English language, which can be a positive indicator for their overall engagement and willingness to improve their writing skills.

Nearly half of the participants, 47% (14 out of 30), expressed being “*Somewhat motivated*”. This group falls in the middle range of motivation, indicating that they had some degree of interest and willingness to write in English but may not have been highly motivated.

A considerable percentage of 33 % (10 out of 30), reported feeling “*Not very motivated*”. These students exhibited lower motivation levels at the beginning of the academic year, suggesting a potential need for strategies to boost their engagement with writing tasks.

Three (03) participants (10%) out of (30) stated that they were “*not motivated at all*” to write in English. This is a noteworthy finding, as it highlights the presence of students who may face significant challenges or barriers to motivation in English writing classes.

The diverse range of motivation levels within the group underscores the importance of considering individual differences in motivation when implementing interventions like automated error corrective feedback. Tailoring such interventions to accommodate varying levels of motivation can be a key factor in their effectiveness.

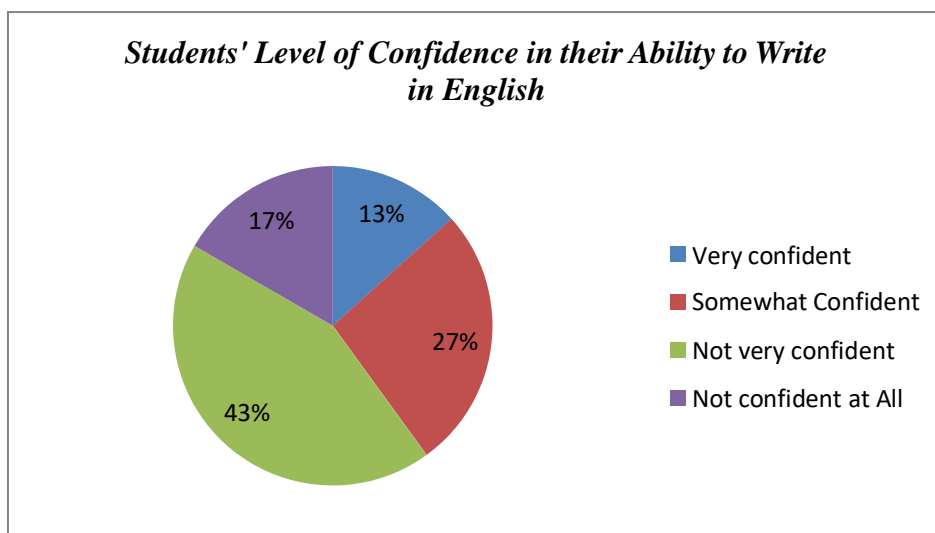
Overall, this baseline assessment of motivation provides valuable context for evaluating changes in motivation over the course of the study, particularly following the integration of ACF into the writing class. It also emphasizes the need for differentiated support to address the unique motivation profiles of students in the group.

Question 10: How confident do you feel in your ability to write in English at the beginning of this academic year?

The results of this question provide insights into the participants' self-perceived confidence in their ability to write in English at the beginning of the academic year. Results are presented as follows:

Figure 26

Students' Level of Confidence in their Ability to Write in English



A small number of four (04) participants with a percentage of (13%) reported feeling “Very confident” in their English writing abilities. This group demonstrated a high degree of self-assuredness in their writing skills, which can positively impact their willingness to engage in writing tasks and their overall performance.

A proportion of (27%) of respondents (8 out of 30), expressed being “*Somewhat confident*”. This suggests that they had a moderate level of confidence in their English writing skills. They may have felt reasonably capable but might have had certain areas of uncertainty.

A majority portion of 43% (13 out of 30), indicated that they were “*Not very confident*”. This suggested that a majority of students had lower levels of confidence in their writing abilities, which could potentially lead to hesitation and reluctance when approaching writing tasks.

Five (05) participants, constituting (17%) of the respondents, reported being “*Not confident at all*” in their English writing ability. This finding highlights the presence of students who may require targeted support and interventions to boost their confidence and competence in writing.

The diversity of confidence levels within the group underscores the importance of considering self-confidence as a factor that can influence students' performance and engagement in writing activities. It is worth noting that self-confidence is a malleable attribute that can be nurtured and developed through effective instructional strategies and interventions.

This baseline assessment of confidence levels provides a foundation for evaluating any changes in confidence that may occur as a result of the integration of automated error corrective feedback (ACF) into the writing instruction. It also emphasizes the need to tailor support and instruction to address the varying levels of confidence among students in the group.

Question 11: Which of the following characteristics of autonomous writer do you possess from the beginning of this academic year?

The responses to question 11 reveal the participants' self-perceived possession of characteristics associated with autonomous writing at the beginning of the academic year. Students' answers on this question are summed up in the following table:

Table 06

Characteristics of Autonomous Writers Possessed at the Beginning of the Academic Year

Characteristics of Autonomous Writers	Number of Students	Percentage (%)
- I have studied English writing by myself	04	13%
- I believe I can push myself to improve writing	03	10%
- I have clear and concrete goals in writing	03	10%
- I clearly know my strengths and weaknesses	08	27%
- I clearly know my English writing level	07 03	23%
- I always try new techniques and material	13	10%
- I have none of these characteristics		43%

A modest number of the participants, 13% (4 out of 30), reported that “they had studied English writing independently”. This suggests that these students engaged in self-directed learning related to writing, indicating a proactive approach to skill development.

A smaller number of participants, 10 % (3 out of 30), believed that “they could push themselves to improve their English writing even in the absence of supervision”. This reflects their strong intrinsic motivation for self-improvement, a characteristic often associated with autonomous writers.

Another minority of students constitutes 10% (3 out of 30), stated that “they had clear and concrete goals in writing”. Setting specific goals can contribute to a more focused and purposeful approach in doing writing tasks.

A notable number of students constitute 27% (8 out of 30) reported that “they clearly knew their strengths and weaknesses in writing”. This self-awareness can be advantageous in tailoring one's learning and practice activities to address areas that need improvement.

Approximately 23% (7 out of 30) of the respondents indicated that “they clearly know their English writing level”. This awareness can guide students in selecting appropriate writing tasks and materials that match their proficiency level.

Only three 03 out of 30 participants (10%), mentioned that “they always tried new techniques and materials when writing in English”. This experimental approach indicates a willingness to explore and innovate in their writing.

What is surprising in the students responses to this question is that almost half of the participants, 43% (13 out of 30), stated that “they have none of these autonomous characteristics”. This unexpected finding suggested that students do not have the necessary personal qualifications and characteristics that would enable them to self-conduct their EFL writing skills improvement. The lack of autonomy displayed by students in their writing emphasizes how crucial it is to take this into account as a factor that may affect their performance and participation in writing activities. It is important to note that autonomy is a flexible quality that may be acquired and ameliorated through effective teaching/ learning strategies and interventions.

These findings suggest that at the beginning of the academic year, a minority of students in the group displayed various characteristics associated with autonomous writing. It is important to recognize and nurture these attributes for the rest majority of the students as they can contribute to more effective and self-directed learning experiences. Additionally, these

baseline data about the possessed autonomous characteristics by the students serves as a reference point for evaluating any changes in their autonomy in writing that may result from the integration of automated error corrective feedback (ACF) into the writing classes.

Section 5: Students' experiences with and perceptions of teacher feedback

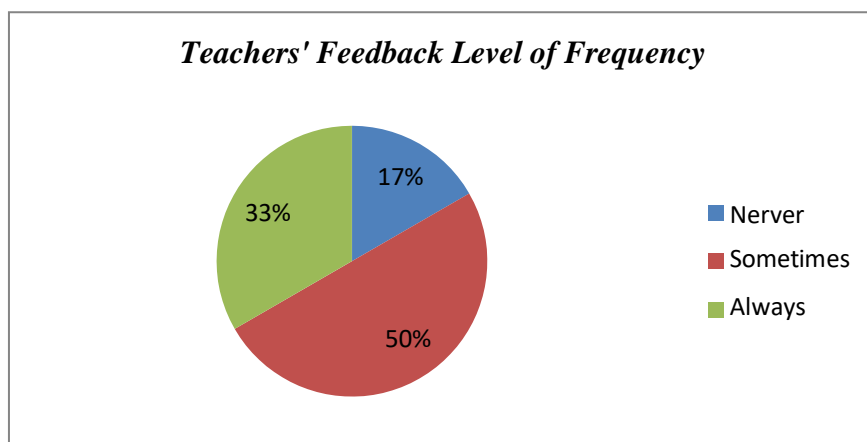
In the fifth section, nine (09) questions are set to tackle second year EFL students' experiences and perceptions to traditional formats of feedback (teacher/peers feedback). It accounts for their teachers'/peers' actual practices of feedback and how they interact with it, the main writing aspects addressed/unaddressed by teachers'/peers' feedback, and the extent to which EFL students are dependent on/independent from their writing teachers in accomplishing their writing tasks.

Question 12: Does your teacher help you when you write?

The responses to question 12 provide insights into the frequency level of teachers' feedback in assisting their students during the writing process. Students' responses are recorded in the figure bellow:

Figure 27

Teachers' Feedback Level of Frequency



Half of the participants, 50% (15 out of 30), reported that their teacher “*Sometimes*” assists them in writing. This category implies that teacher support is provided intermittently rather than consistently.

About one-third of the participants, 33 % (10 out of 30), indicated that their teacher “*Always*” helps them when they write. This suggests that teachers are actively involved in supporting their students’ writing endeavors with only a limited number of students.

A minority of participants, 17% (5 out of 30), stated that their teacher “*Never*” helps them when they write. This indicates a lack of teacher involvement in the writing process for these students.

Lack or inconsistency of teachers’ feedback may be due to time constraints and the large number of students who commit numerous errors which make it difficult for the teachers to provide timely and personalized feedback to each student in the group. These factors among others certainly affect the continuity and quality of the teacher provided feedback.

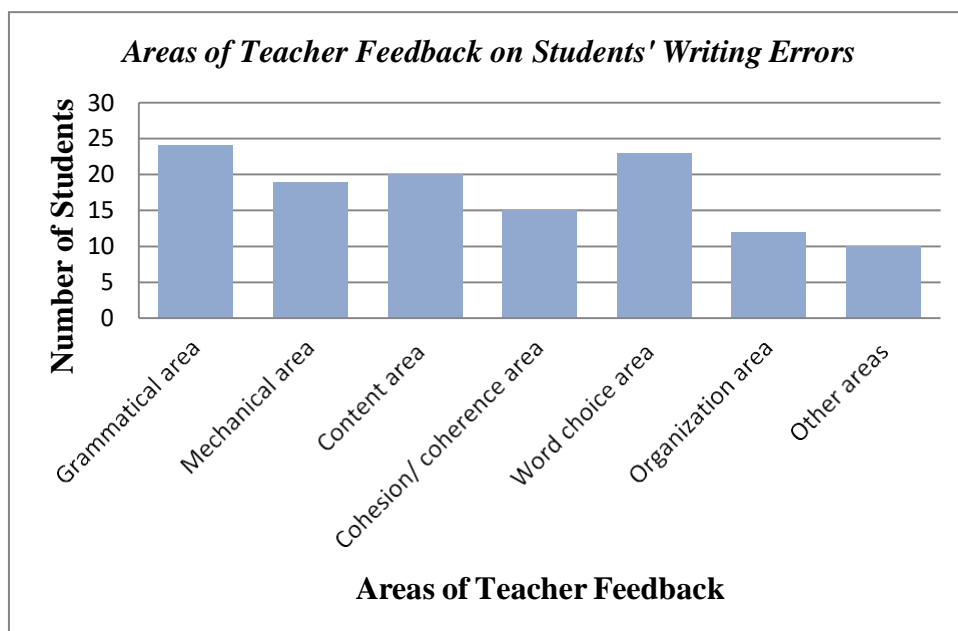
The findings highlight a range of frequency levels regarding teacher assistance in writing, with a minority of students feeling that their teachers are actively engaged in providing support. However, it's important to note that there are variations in the frequency and extent of teacher assistance, as indicated by the majority of the students, the "sometimes" to “never” category. These different levels of teachers’ feedback frequency can influence students' writing experiences and their level of comfort in seeking help from their teacher. Exploring these levels of feedback frequency is crucial for instructors to adapt their teaching strategies and support mechanisms effectively. Additionally, these baseline data will be valuable for assessing any changes in students' perceptions of teacher feedback following the integration of automated error corrective feedback (ACF) into the writing instruction process.

Question 13: On which area of writing does your teacher provide you with feedback?

This question aimed to understand the specific areas of writing on which teachers provide feedback to students. The responses indicate the distribution of feedback across various aspects of writing as shown in the figure bellow:

Figure 28

Areas of Feedback Provided by Teachers



The majority of participants which consists of 80 % (24 out of 30) mentioned receiving feedback on “*grammatical*” aspects of their writing. This feedback likely addresses issues related to verb tense, subject-verb agreement, sentence structure, and other grammatical errors. This result may be due to two main factors. Either due to the fact that teachers prioritize addressing these fundamental aspects of writing to improve overall writing proficiency, or due to the fact that the most frequent errors committed by the students are those related to grammatical aspects as reported by the students in question (05) when they were asked about their most frequent errors in writing.

A significant portion of participants reported receiving feedback on “*vocabulary and word choice*” 77% (23 out of 30). This feedback likely helps students expand their vocabulary and choose more appropriate words and expressions in their writing. Effective vocabulary usage is crucial for conveying ideas accurately.

A proportion of 67% (20 out of 30) of the participants mentioned receiving feedback on “*the content*” area of their errors. This area of teacher feedback assisted students to not deviate from the subject, the purpose of the written task and the target audience of his written piece...etc

Near to the content area, “*the mechanical*” area of teachers’ feedback to students’ errors is stated by a majority of 63% of the respondents (19 out of 30). This suggested that teachers take a great care to the writing issues related to spelling, punctuation, capitalization, and indentation to maintain the overall clarity and quality of the written work.

Half of the participants, 50% (15 out of 30) received teacher feedback on “*cohesion and coherence*” related errors. This feedback focuses on the logical flow and connection of ideas within a text, which is essential for effective communication.

Another notable proportion of 33% (10 out of 30) of students stated that they receive teacher feedback on the “*Organization*” of their written texts, this area of feedback enables the students to convey their ideas in a systematic and structured manner following a logical organization of sentences and paragraphs.

The analysis of the obtained results from question (13) revealed that teachers provide feedback on a range of writing aspects with different proportions emphasizing grammatical, vocabulary, content and mechanical areas of students’ writing errors without neglecting errors related to cohesion, coherence and organization. Therefore, it can be noted that teachers’ feedback is comprehensive.

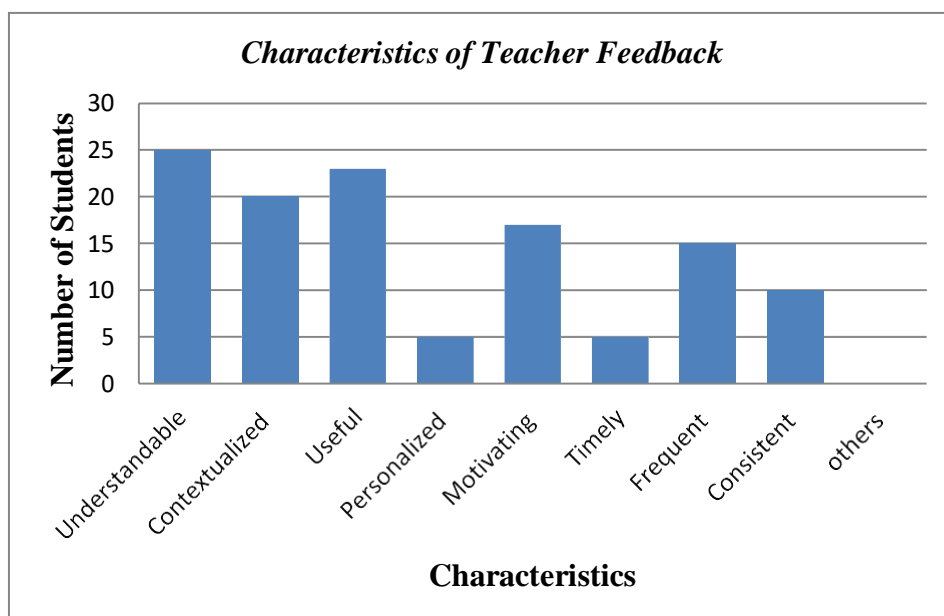
Additionally, it is worth noting that the percentages in some categories may seem little low than other categories. This could be due to various factors, including differences in teaching approaches and individual student needs. Furthermore, some participants may receive feedback in multiple areas simultaneously. Understanding these areas of teacher feedback focus helps in tailoring writing instruction to address students' specific needs effectively.

Question 14: What are the main characteristics of your writing teachers' feedback?

Question (20) seeks to shed light on students' views about the characteristics of the feedback they receive from teachers on their writings. It's important to consider these characteristics when providing effective feedback in writing instruction. The results were as follows:

Figure 29

Characteristics of Writing Teachers' Feedback



An overwhelming majority of the students, 83% (25 out of 30) acknowledged that their teachers' feedback is "*Understandable*". This demonstrated that teachers provide easy, simple

and clear feedback without confusing terms or complex instructions so that students can easily grasp the intended meaning, understand it and implement it.

Another major proportion of 80% (23 out of 30) confirm the “usefulness” of their teachers’ feedback. This reveals that teachers deliver a kind of feedback (comment, advice, correction, suggestion...) that is useful for their writing tasks and relevant contributes to their writing objectives. Teachers’ useful feedback on students’ writings promotes motivation and creates conducive learning environment.

A proportion of two-thirds consists of 67% (20 out of 30) of the respondents declared that teachers’ feedback is “*Contextualized*”. This may suggest that teachers recognize that feedback is situational. When they provide feedback to their students, they match it with the circumstances in which it is delivered.

A notable proportion of 57% (17 out of 30) of students mention the “*Motivating*” feature of teacher feedback. This reflects teachers’ awareness of the importance of motivating students in order to encourage them continue their improvements in writing. In addition to negative feedback, teachers may praise students and highlight the good things and the points of power they have and lean on those points to achieve progress. For the rest of the students (12 out of 30) who did not consider teacher feedback as motivating, maybe they cannot tolerate the criticism directed at them by their teachers or they may consider it frustrating and detracting from their abilities.

Half of the participants, 50% (15 out of 30) stated that their teachers’ feedback is “*frequent*”. This means that the teachers provide many opportunities to these students to practice via interacting with them repeatedly in order to consolidate and fixate the received feedback because without repetition even well-learned information go away. For those who see that their teachers’ feedback infrequent (15 out of 30), this may be due to time constraints

and the large number of students which prevent the teacher from giving recurrent feedback to all the students at the same pace.

One third of the respondents consists of 33% (10 out of 30) agreed that teachers' feedback is "*Consistent*". This suggests that teachers provide these students with continuous and ongoing feedback throughout the writing task which helps them track their progress and make incremental improvements over time. The rest two-thirds (20 out of 30) did not receive consistent feedback from their writing teacher, this may be due to the teachers' struggles with many condition within EFL writing instructional context, among them time and class size constraints.

A minority of 17% (5 out of 30) of the respondents mentioned the "*Personalization*" aspect of their teachers' feedback. This suggests that teachers deliver individualized feedback to only a small number of students. Teachers should take into account individual needs, performance level and learning styles of students in order to offer them tailored suggestions that align with their specific goals and abilities. This enables the teachers as well as the students to recognize their unique strengths overtime. The other (25 out of 30) students do not receive personalized feedback this may be due to the same challenges cited before.

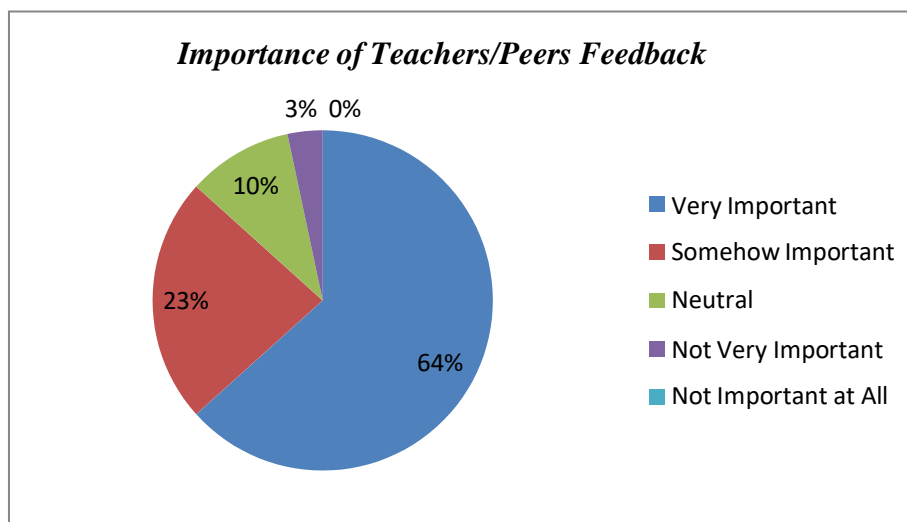
Only a proportion of 17% (5 out of 30) declared that their teachers' feedback is "*Timely*". This revealed that teachers deliver prompt feedback to a minority of students. Timely feedback enables students to address their weaknesses and build upon their strengths while the content is still fresh in their minds. It also shows students that their work is valued and encourages them to stay engaged and motivated. The rest majority of the respondents (83%) do not benefit from their teachers' timely feedback because of the constraints related to time and the number of students which make them principally think of how to cover the content of the prescribed syllabus and urge the need for other types of feedback that are less time consuming.

Question 15: How important is the feedback received from others (teachers /peers) for your writing process?

The objective behind this question is to gain insights on the students' perceptions of their teachers' and peers' feedback. The findings are reported in the following figure:

Figure 30

Importance of Teacher'/Peers' Feedback



A significant majority of participants consists of 63% (19 out of 30) regarded feedback from teachers and peers as “*Very important*” in their writing process. This suggests that students highly value the input and guidance they receive from others in improving their writing skills.

A notable portion of participants of 23% (7 out of 30) considered feedback to be “*Somehow important*”, indicating that while they recognize its value, they may not place it as their highest priority in the writing process.

A smaller number of participants consists of 10% (3 out of 30) expressed a “*Neutral*” stance, neither emphasizing nor devaluing feedback. They may have a more balanced view of its importance.

Only one participant (3%) indicated that teacher/peer feedback is “*Not very important*”. This could imply that he is more self-reliant in his writing endeavors.

Interestingly, no participants selected “*Not important at all*,” indicating that even those who might not prioritize feedback entirely still find it at least somewhat important.

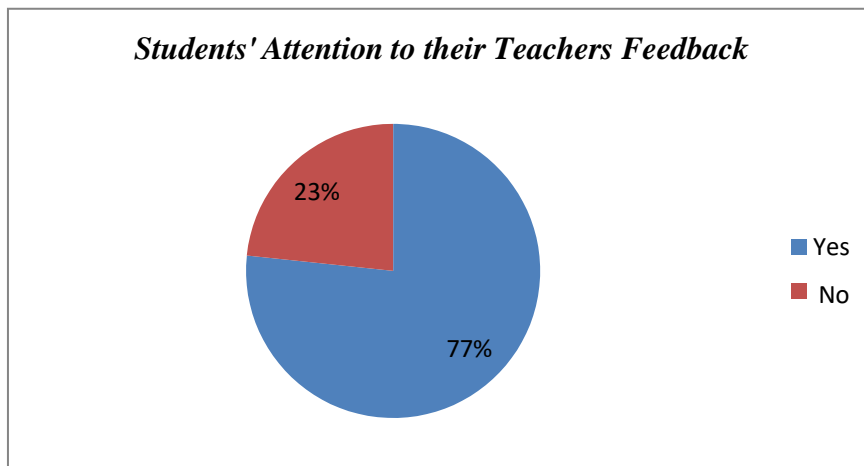
Participants were asked to provide justifications for their chosen level of importance. Only one participant justifies his perception of teachers/peers feedback. These are his arguments

"I rated feedback as 'Very Important' because it plays a crucial role in my writing process. Firstly, feedback helps me identify and correct errors that I might overlook on my own. This is especially important for improving my grasp of English grammar and syntax. Secondly, the guidance offered through feedback is invaluable. It not only points out what is wrong but also provides suggestions on how to enhance the clarity and effectiveness of my writing. Additionally, feedback from both teachers and peers offers diverse perspectives. I value the different insights I gain from them, which ultimately enriches my writing. Moreover, feedback ensures that I meet the specific requirements of writing assignments, preventing me from going off track. Lastly, it fosters a sense of self-improvement and continuous learning. Knowing that I can grow as a writer with the help of constructive feedback motivates me to keep honing my writing skills."

Question 16: Do you actually pay attention to the feedback you receive?

Figure 31

Students' Attention to their Teachers Feedback



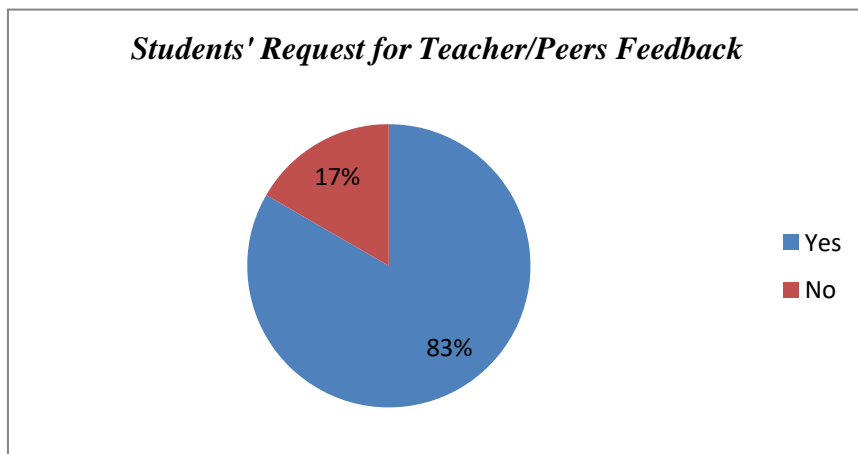
As shown in the figure above, a big majority of students represent 77% (23 out of 30) demonstrated that they actually pay attention to their teachers' provided feedback. This may suggest that these students are aware about the paramount importance of their teacher feedback to their progress and appreciate it.

For the 23% of students who stated that they do not pay attention to their teachers' feedback, this may demonstrate that these students are self-directed and consider depending on their teachers in their learning as "out dated" and /or demotivating, especially when they receive their essays corrections all scribbled in red pen.

Overall, students' attention to their teachers' feedback is affected by many factors, including how they perceive it, and the extent of their self-direction or dependent behaviors.

Question 17: Do you ask your teacher/peers for help and feedback during writing?

This question is designed to understand students' reliance on their teachers' and peers' feedback. The results are presented in the following figure:

Figure 32*Students' Request for Teacher/ Peers Feedback*

A large majority of participants (83%) indicated that they do ask their writing teacher/peers for help and feedback. This demonstrates a high level of teacher/peers feedback use from the part of students who actively engage in seeking assistance during writing and therefore enhance their writing.

On the other hand, a minority of 17% of the students (5 out of 30) stated that they do not ask for feedback from their teachers. Justifications for the students' answers on question (15) are presented in the analysis of the findings of questions (16) and (17) as follows.

Question 18: If yes, to what degree are you agree /disagree with the following statements (your degree of dependence on your writing teacher/peers)?, By indicating your level of agreement with each statement?

Strongly agree**Agree****Disagree****Strongly disagree**

a- I like the teacher tell me what to write about.

b- The teacher should explain in detail the requirements of each writing task.

c- When I write, the teacher should provide me with model essays as well as vocabulary and sentence patterns related to the topic.

The students who said “Yes” (25 students), declared that they ask their teachers and students for feedback and help during writing are asked to express their degree of dependence on this requested feedback. The findings are summed up in the following table.

Table 07

Degree of Students' Dependence on Teacher/Peers Feedback

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
a- I like the teacher tell me what to write about	7	2	0	10
b-The teacher should explain in detail the requirements...	10	3	2	2
c- When I write, the teacher should provide me with...	12	3	2	7

Participants' responses to these statements indicate their level of agreement or disagreement with different aspects of dependence on teachers' feedback for writing guidance.

Concerning statement “a”, a minor proportion of 28% (7 out of 25) were “Strongly agree” and 8% (2 out of 25) were “Agree” with it. These students need from their teachers/peers just to guide them and “tell them what to write about”. This suggests that these students recognize the importance of feedback however they are independent to some extent from their teachers indicating a degree of independence and self-reliance in their writing process. On the other hand, a majority of 40% (10 from 25) were “Strongly disagree” with statement “a”. This portion of respondents may need from their teacher/peers more than guidance and orientation. This finding reflects the big extent of reliance of these students on their teachers.

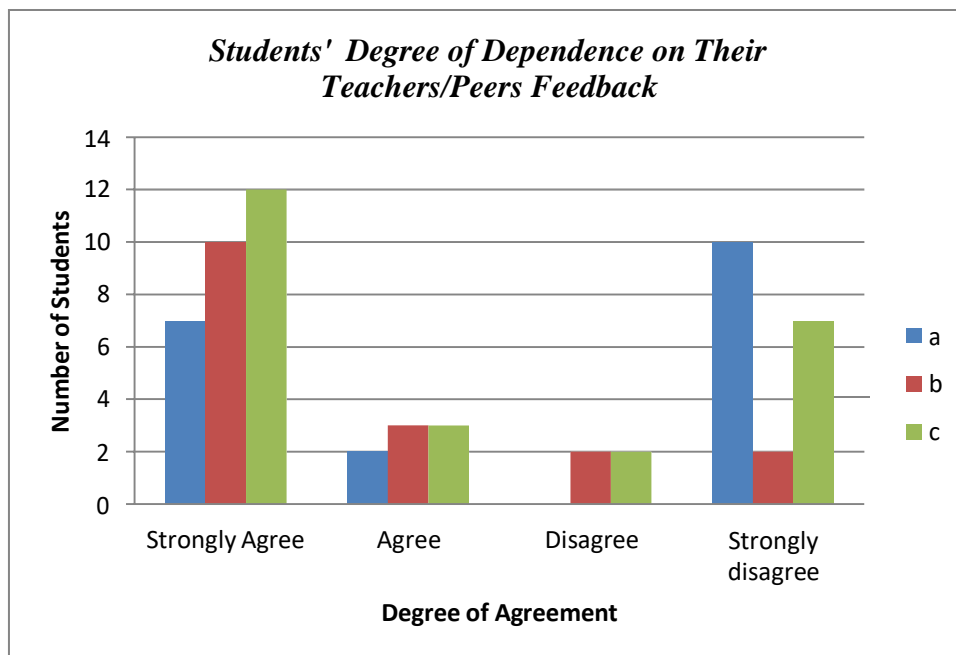
As far as statement “b” is concerned, a significant number of students constitute 40% (10 out of 25) “Strongly Agree” with the statement in addition to 12% (3 out of 25) who were “Agree”. These students see that their teacher “*should explain in detail the requirements of each writing task*”. These findings suggest that these students strongly depend on their teachers’ feedback in fulfilling their writing tasks, while a minority of 8% (2 out of 25) of the students were “Strongly Disagree” followed by other proportion of 8% (2 out of 25) who were “Disagree with statement “b”. These students’ disagreement with statement “b” could be interpreted from two sides either to be from those who were agree with statement “a” which encourages students self-dependence, or from those who are strongly agree or agree with statement “c” which encourages students on being mere dependents on their teachers.

Statement “c” states that “*the teacher should provide students with model essays as well as vocabulary and sentence patterns related to the topic*”, i.e, those who stated that they were “Strongly Agree” with statement “c”, almost the half of the respondents (48%), followed by 12% (3 out of 25) who said that they “Agree”, they do value guidance and support from their teachers, however, they advocate for more teacher intervention in the writing/ correction process and this may reflect their lack of autonomy and self-direction in writing. Opposite to these results, 28% (7 out of 25) of the respondents were “Strongly disagree” with statement “c”, followed by 12% (3 out of 25) who were “Disagree” with it. Apparently these are the same students who support statement “a” (the self-dependent portion of the participants).

Overall, Although the responses reflect a diversity of preferences and needs when it comes to the role of teachers in providing guidance and structure in the writing process, the majority of the respondents tend to rely more on their teachers’ feedback during writing, suggesting that they lack autonomous characteristics and strategies in writing, and this confirms the findings obtained from questions (08) and (11) above. The following figure clarifies the previous table’s content.

Figure 33

Degree of Students' Dependence on Teacher/Peers Feedback



Question 19: If no, say why?

The students who said “No” and declared that they do not ask their teachers and students for feedback and help during writing (05 students) are asked to justify their answer.

The findings are summed up in the following table:

Table 08

Students' Justification for their “No” Answer

Statement	Number of Students
a- I somehow feel shy and insecure when my teacher or peers recognize or notice I make errors in writing.	3
b- I do not like other people to read my writing	2
c- I do not like asking others questions related to writing	0

Three (03) out of the five (05) students whose answer on question 15 was “No”, mentioned “*feeling shy and insecure when their errors in writing were recognized by teachers or peers*”. Shyness and insecurity were common psychological factors that affect students’

perception and use of their teachers' feedback. Also, this may be due to the unequal power relationship between the teacher and his students which makes it challenging for the students to be courageous to ask their teachers for feedback.

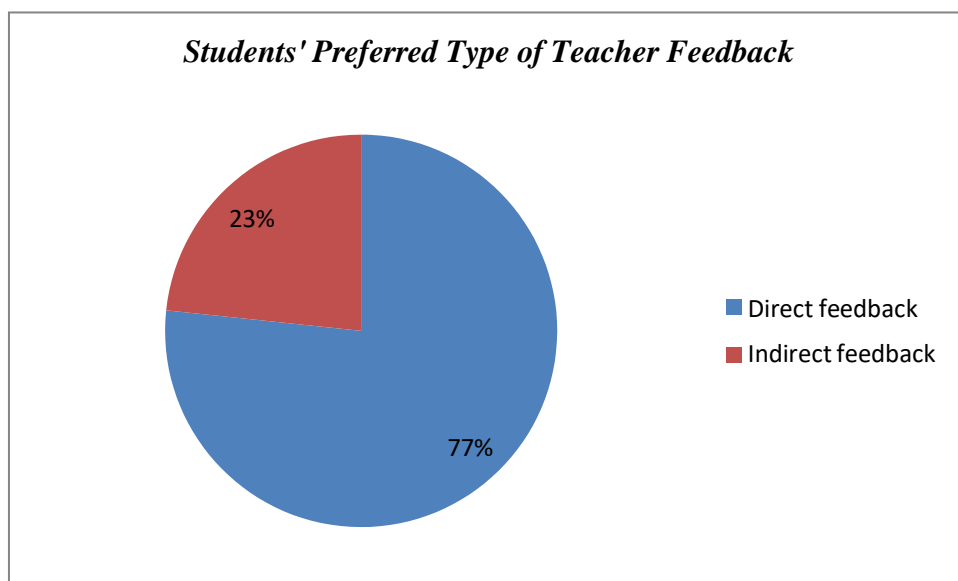
The rest two (02) students stated that they “*do not like other people to read their writing*”. This suggests that they may lack confidence in their ability in writing. They also may be introvert students who do not support collaborative work.

No one of the students stated that they “*do not like asking others questions related to writing*”.

Question 20: Which type of feedback you prefer your teacher provide you with?

Figure 34

Students' Preferred Type of Teacher Feedback



According to the figure above, a portion of more than two thirds of the students represent 77% (23 out of 30) preferred teachers “Direct feedback”. This implies that the majority of students prefer direct corrections to their writing errors by their teachers who directly point out the students’ errors without delegating any responsibility to them. This

demonstrates that these students prefer to depend solely on their teachers in correcting writing errors. They may lack the strategies and characteristics of autonomous writers or.

The rest minority of the participants 23% (7 out of 30) stated that they prefer their teachers' "Indirect feedback". This means that these students need just guidance from their teachers who indirectly indicate the errors without suggesting corrections to these errors. This suggests an active engagement from the part of these students to self-correct their errors and therefore enhance their writing skills and autonomy in the long run.

The analysis of the findings obtained from question (18) revealed that teachers provide both direct and indirect feedback to assist their students to improve their writing skills. The majority of the students prefer their teachers providing them with direct feedback, however, This type of feedback is not align with new trends in language teaching and learning and it fails to develop students' autonomy, therefore, it is no longer accepted by many other students and the need for more learner-centered error correction methods is urged.

Section 6: Students' Experience and perceptions of Automated Error Corrective Feedback

The sixth section is directed mainly to shed light on EFL students' experiences with/ and perceptions of automated corrective feedback. This section aims to elicit the students' previous experiences, if they exist, with ACF tools in general and WIF in particular, how they interact with it and how they perceive the integration of these tools in their writing instructional context.

Question 21: Have you ever used any automated error corrective feedback tools for improving your English writing skills before participating in this study?

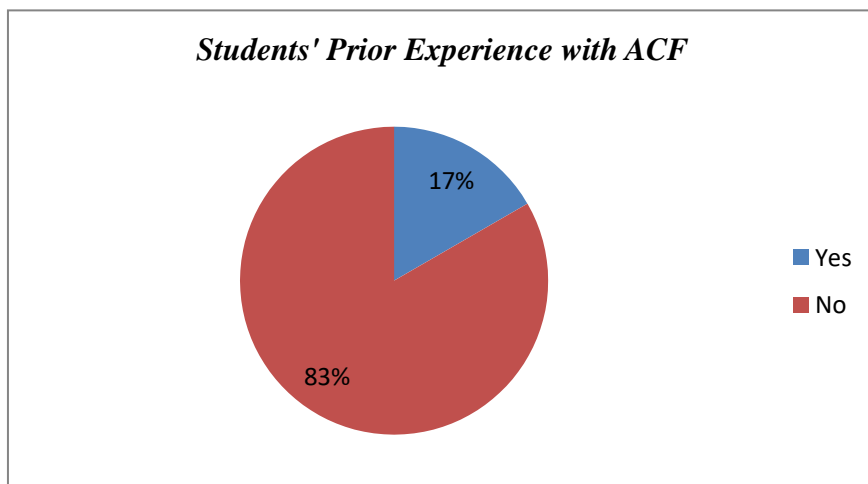
- Yes
- No

The aim behind this question is to know about the students' prior experiences with automated corrective feedback tools. The results were unexpected from the part of the teacher

because a large majority of the students revealed that they do not have any idea about ACF tools as mentioned in the figure bellow:

Figure 35

Students Prior Experiences with ACF



The responses to question (21) provide insights into the participants' prior experiences with automated error corrective feedback tools in the context of improving their English writing skills.

A small portion of participants consists of 17% (05 out of 30) have previously used automated error corrective feedback tools. On the other hand, a considerable portion, 83% (25 out of 30) of the participants are not familiar with such tools and have not engaged with them before this study.

22- If yes, please briefly describe your experience with these tools, including any specific tools or platforms you have used and your general impressions.

Only one student responds to this open-ended question, he stated:

“..... I used *Grammarly*, and it helped me catch grammar mistakes.”

This participant reported a positive experience with the automated error corrective feedback tool *Grammarly*. He mentioned that *Grammarly* was effective in helping him identify and correct grammar mistakes in his writing.

This aligns with the general purpose of such tools, which is to assist users in improving the correctness and clarity of their written content. It suggests that automated tools like Grammarly can be valuable resources for learners seeking to enhance their writing skills by addressing grammar issues.

23- Please share your perceptions of the use of ACF tools in the following areas by indicating your level of agreement with each statement:

Strongly Agree Agree Neutral Disagree Strongly Disagree

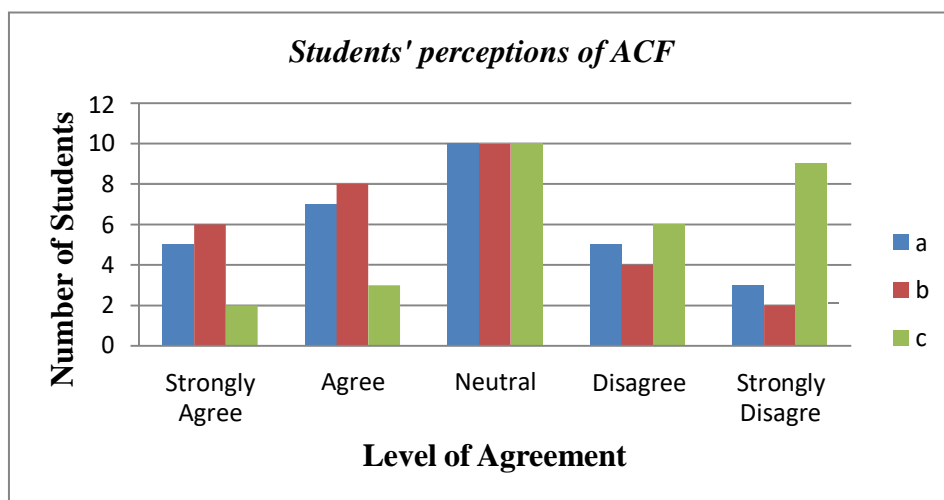
a- Automated feedback may help me improve my writing skills

b- Automated feedback may help me become more autonomous in my writing

c- Automated feedback may be as effective as teacher feedback

Figure 36

Students' Perceptions of ACF



Concerning students' degrees of agreement with statement "a" which states that "Automated feedback may help them improve their writing skills, a notable proportion of participants, 23% (7 out of 30) showed that they were "Agree" with it, followed by a proportion of 17% (5 out of 30) who showed they were "Strongly agree" with the same statement. This may suggest that these students expressed open-mindedness and positive

attitudes toward the potential benefits of automated feedback. Although they had not used automated feedback before, they believed it might help improve their writing skills. Oppositely, 17% (5 out of 30) of participants expressed their “Disagreement”, followed by 10% (3 out of 30) who mentioned that they “Strongly disagree” with statement “a”. These results suggest that these students may not trust these tools since they have no idea about its use, or they may be afraid to use it in their writing classes.

As far as statement “b” is concerned, On the one hand, eight (08) participants out of thirty (27%) expressed their “Agreement” with statement “b”, followed by 20% (6 out of 30) of students who were “Strongly agree” with the same statement. This suggests that these students may believe that “automated feedback could enhance their autonomy in writing”. This indicates that these participants are receptive to the idea of incorporating automated feedback into their writing process to support their autonomy development. On the other hand, four (4) students were “Disagree” with statement “b” followed by (02) students who were “Strongly disagree”. These students resist and do not believe in the potential of ACF tools in enhancing their autonomy.

Concerning students’ agreement/disagreement with statement “c”, the majority of the students (9 out of 30) represent a percentage of 30% mentioned that they were “Strongly disagree” followed by (6 out of 30) who were “Disagree” with statement “c” which says that “*Automated feedback may be as effective as teacher feedback*”. It seems that these students did not accept the idea that ACF has the same value of their teachers’ feedback and it could replace it. This may suggest that these students resist the integration of ACF tools in their writing classes.

It was also noticed that only (3 out of 30) of students who represent a percentage of (10%), followed by 7% (02 out of 30) students, considered “*automated feedback to be “a potential substitute for teacher feedback*”, highlighting their perception of its effectiveness.

This viewpoint may suggest that some participants believe that automated tools could provide comparable feedback to that of teachers.

One third of the respondents (10 out of 30) remain “*Neutral*” with the three statements. This may be due to the fact that they do not have any idea about these automated tools because they had never utilized it before.

Q24- Please feel free to share any additional comments, insights, perceptions or experiences related to automated error corrective feedback in your English writing assignments.

This last question aims to gain more students’ insights, perceptions or experiences related to ACF and its use in their writing classes. The followings are the main statements provided by the students.

"I think automated tools helpful for catching basic errors, but they don't provide the in-depth feedback that a teacher can."

"In my opinion, automated feedback is quick and convenient, especially for small errors, but it lacks the personal touch of teacher feedback."

"I like that automated feedback is available anytime, but I still prefer human feedback for more advanced writing skills."

"Using automated tools alongside teacher feedback can be a good combination to improve writing."

"Automated feedback is a valuable initial step, but I rely on teacher feedback for improving the content and structure of my writing."

"Automated feedback is useful for self-correction, but it can't replace the guidance and explanations provided by teachers."

"I appreciate automated feedback for its timeliness, but it sometimes misses the context of my writing."

"Automated feedback has made me more aware of common errors, and I use it as a self-checking tool."

These comments provide additional insights into the participants' nuanced perspectives on the use of automated error corrective feedback in English writing assignments. While many recognize its convenience and usefulness for catching basic errors, they also value the guidance and context provided by human feedback. Some participants find a balanced approach, using both automated and teacher feedback, to be most effective in enhancing their writing skills.

Summary and Discussion of the Findings of the Questionnaire

The pre-experiment students' questionnaire was administered so as to investigate first year EFL students' overall experiences with EFL writing at the Department of English of Mohamed Cherif Messadia University, Souk-ahras (Algeria) and to investigate their perspectives on their level in writing in English, their most frequent errors, the factors leading to these errors, and their autonomous strategies and practices to minimize these errors. Another main focus of the questionnaire was to gain insights about students' perceptions of their teachers' feedback on their writing errors, and to know about their prior experiences with automated corrective feedback as well as their initial perspectives about its implementation in their writing classes.

First of all, concerning EFL students' overall experiences with writing in English, the analysis of the obtained data revealed that the majority of the students had a *favorable outlook* on their experience with writing in English. As for their awareness of the importance of EFL writing, a significant proportion of participants acknowledged the significance of writing skills in their academic and future professional endeavors. However, although students awareness of the importance of writing, emphasizing its interesting status in English language learning, the majority of them still not able to achieve a high level of writing proficiency and

perceived themselves as *intermediate* to *beginner* students in English writing at the outset of the academic year. This suggests that they may be aware of the areas in need for improvement in their writing skills. Hence, in order for them to be proficient writers, students should minimize their writing errors using different learning strategies, practices and materials so as they can face English writing challenges and decrease its difficulties.

Other important findings derived from the questionnaire are those related to the students' perceived level of difficulty of the writing tasks, the types of errors they frequently commit, and the main factors contributing to these errors. According to these findings, almost half of the participants found EFL writing tasks to be of medium difficult, suggesting that a substantial number of students consider EFL writing tasks to be moderately challenging, but not overwhelmingly so. This perceived level of difficulty of writing tasks can be linked to the participants' intermediate level of writing of the majority of the participants. The writing tasks level of difficulty controls the number and types of errors which appear in students' pieces of writings.

Accordingly, understanding these specific error patterns is crucial for tailoring instructional practices to successfully address the students' writing needs effectively. To do so, students were asked about their most frequent types of writing errors. They stated that their most common identified errors include grammatical errors, vocabulary issues and mechanical errors, followed by content related errors, cohesion and coherence errors, and organization errors respectively. This suggests that first year EFL students often struggle with weaknesses in a range of writing areas and commit different types of errors. This suggests that these errors are caused by many factors, and the students' perceived intermediate to low writing level undoubtedly is one of these factors.

Therefore, so as to better understand the main factors contributing to the occurrence of these errors, the students were asked to provide the ones related to themselves. Students

reported a multifaceted nature of factors addressing *linguistic, psychological* and *cognitive* factors (inner factors related by the student himself), followed *teaching* and *time-related* factors (outer factors related to the instructional environment). To reduce the impact of these factors on students' writing quality and to minimize their errors, they should be proactive students and make efforts at least on the inner factors' level via using various self-correction strategies and practices during their writing.

Subsequently, it is worth exploring students' self-correction strategies and practices for the sake of having insights about EFL students' awareness about their learning strategies, and the extent to which they practice self feedback to correct their errors. The findings reflect the diversity of strategies employed by EFL learners to enhance the quality of their writing, with drafting and revision being the most prevalent strategies followed by brainstorming and planning strategies. The participants' preferences for particular strategies may vary based on their individual writing processes and experiences. Concerning self direction practices students used to exercise in order to improve their writing outcomes, thwarting findings were obtained since the majority of the students reported disengaging in any form of these practices to improve their writing which implies that they are not resourceful in their efforts to improve their writing skills.

Students' reluctance in exercising self-direction practices to improve their writing proficiency indicated that these students are disengaged and *demotivated* ones. This was confirmed by them through their responses on the question about their level of motivation to write in English. The majority of the students' responses ranged between being "somewhat motivated" (47%, almost half of the participants) and "not very motivated" (33%, one third of the participants). This baseline assessment of motivation provides valuable context for evaluating changes in motivation over the course of the study, particularly following the integration of ACF into the writing class. It also emphasizes the need for differentiated

support to address the unique motivation profiles of students in the group. This lack of motivation of students towards writing in English may be due either to teachers' instructional practices, their teaching approaches and/or teaching materials, or due to students' related internal attitudes and characteristics such as their confidence in their ability to write, their self dependence and/ or their self direction.

The majority of participants when asked about their self-perceived confidence in their ability to write in English stated that they were “*not very confident*” reinforced by a minority who stated that they were “*not confident at all*”. In the same context, students were questioned on their own self-dependence and self-direction characteristics in order to know about their level of autonomy. Although a modest number of students showed that they have acquired some of the autonomous characteristics, it was surprising and disappointing for the researcher that an overwhelming majority of them stated that “they have none of these “*autonomous characteristics*”. These findings explain to some extent the direct relationship between students' level of motivation and self-confidence behaviors, their self-dependence and self-direction attitudes and their overall autonomy. These baseline assessments of all these students' autonomous behaviors and characteristics provide a foundation for evaluating any changes in them that may occur as a result of the integration of automated error corrective feedback (ACF) into the writing instruction. It also emphasizes the need to tailor support and instruction to address the varying levels of autonomy among students in the group.

The previous presented findings of the study about students' self-feedback strategies and characteristics indicate that these students are poor to such effective ones. This suggests that they may in an urge need to their teachers', peers' and other sources' feedback. Students in this study were asked about their perceptions of many aspects of their teachers' feedback, its importance, its areas, and its main characteristics. They were also questioned about their

reactions with it, their level of request for it, their degree of dependence on it, and their actual attention to it.

As far as participants' view to their teachers' feedback *importance*, the majority of them regarded it as "very important", and this suggests that these students highly value the input and guidance they receive from their teachers in improving their writing skills. This is later argued by their responses on their *level of request for it*, where the overwhelming majority of them (83%) declared that they do ask their teachers for feedback, this means that even the minority of students who might not prioritize teachers' feedback entirely still find it at least "*somewhat important*" and ask for it. Additionally, when asked about their actual attention to their teachers' feedback, the majority of (77%) demonstrated that they actually pay attention to their teachers' provided feedback. This mentioned that these students are aware about the paramount importance of their teacher feedback to their progress and appreciate it.

Another finding which supports students' perceived level of teachers' feedback importance is that obtained from their responses about the main areas addressed by their teachers' feedback which confirmed that teachers provide a comprehensive feedback on a range of writing aspects with different proportions emphasizing *grammatical*, *vocabulary*, *content* and *mechanical* areas of students' writing errors without neglecting errors related to *cohesion*, *coherence* and *organization*. Also, the findings about the importance of teacher feedback were reinforced by the students' perceptions of its main characteristics. The majority of the students emphasized that the provided feedback by their teachers on their writing errors is *understandable*, *useful*, *contextualized*, and *motivating*.

Although its helpful characteristics, teachers' feedback effectiveness in enhancing students' writing level is impeded by many factors mainly time and class-size constraints which prevent it from being *timely*, *personalized*, *frequent* and *consistent*. These negative characteristics were stated by a notable number of participants. These constraints make them

principally think of how to cover the content of the prescribed syllabus and urge the need for other types of feedback that are less time consuming. These baseline data will be valuable for making comparisons between the characteristics of teacher feedback and automated corrective feedback following its integration in the writing instruction process.

Regarding the students' preferential view to their teachers' feedback, their responses about the degree of their dependence on them was expected. The findings reflect the big extent of reliance of these students on their teachers in fulfilling their writing tasks and this may reflect their lack of autonomous characteristics, lack of self-direction strategies and lack of dependent behavior in writing. Moreover, these findings were supported by those obtained from students' responses about their preferred type of teacher feedback where they were biased to the teachers' *direct feedback type* via which the teacher directly points out the students' errors without delegating any responsibility to them. This demonstrates that these students prefer to depend solely on their teachers in correcting writing errors. However, This type of feedback is not align with new trends in language teaching and learning and it fails to develop students' autonomy, therefore, it is no longer accepted by many other students and the need for more learner-centered error correction methods and tools is urged.

Finally, questioning students about their previous experiences with ACF tools in general and WIF in particular, how they interact with it and how they perceive the integration of these tools in their writing instructional context revealed unexpected findings. A large majority of (83%) of the students reported that they are not familiar with such tools and have not engaged with them before this study. Even those who have used ACF tools, these were of other types like "Grammarly", not "Write & Improve" tool.

Concerning their perceptions of ACF tools use and implementation in their writing tasks, one third of the respondents were "*Neutral*", this may be due to the fact that they do not have any idea about these automated tools because they had never utilized it before. The

opinions of the rest of the students were different and range between those who are receptive to the idea of incorporating automated feedback into their writing process to support their autonomy development and those who resist and do not believe in the potential of ACF tools in enhancing their autonomy, i.e, there are students who expressed open-mindedness and positive attitudes toward the potential benefits of automated feedback and others who may not trust these tools since they have no idea about its use, or they may be afraid to use it in their writing classes. Also, students' opinions about the effectiveness of ACF rejected the suggested proposition that "*automated feedback may be as effective as teacher feedback*". It seems that these students did not accept the idea that ACF has the same value of their teachers' feedback and it could replace it.

Conclusion

These pre-experiment questionnaire findings serve as a baseline for assessing the impact of automated error corrective feedback (ACF), specifically the "Write & Improve" Feedback (WIF) tool, on students' writing skills and autonomy. Subsequent section of this chapter will delve into the post-experiment results and interpretations, allowing for a comparison of findings before and after the integration of WIF into the writing instruction process.

The Results of the Quasi-Experiment

After investigating the overall context of EFL writing instruction and learning in the Department of English of MCMU through the pre-experiment questionnaire which provided baseline data on first year students' initial perceptions of writing skills, autonomy, common writing challenges, and error correction strategies, a quasi-experiment was conducted so as to gauge the effectiveness of ACF, specifically the "Write & Improve" feedback, implementation in improving their writing skills and autonomy. The experimental group, consisting of 30 participants, received WIF-based instruction, while the control group (n=30) did not receive WIF. The participants were pre and post-tested on their level of writing proficiency and autonomy. This section presents the findings derived from the analysis of the quasi-experiment findings.

The Results of the Pre-test

Students' Pre-test Number and Types of Errors

The objective of the present study is to decrease students' writing errors. To reach this aim, the researcher analyzed the number of the emerged errors in the pre-test writings of all the students (n=60) and their most frequent types. Therefore, students' errors were counted and classified into main types according to their frequency in the students' paragraphs. In addition, the students' scores and levels were presented and compared according to their groups (Control group vs Experimental group) in order to gain insights about their overall level before embarking in the intervention phase, and to compare between their levels prior to any received feedback. The findings are presented as follows:

Mean Number and SD of All Students' Pre-test Errors. The errors emerged in the students' pre-test writings prior to any corrective feedback are counted and their sum, mean and SD are presented in the table bellow:

Table 09*Mean Number and SD of All Students' Pre-test Errors*

	Num	Sum	Minimum	Maximum	Mean	SD
Pre-test Errors	60	1001	22	37	30,3	10,6

As it is clearly shown in the table above, the sum of the number of errors committed by the students in the pre-test is 1001 errors within 60 paragraphs of 90-110 words with a mean of 30.3 errors per paragraph. It is a high but expected mean from the part of the researcher who previously suggested that first year license students make numerous errors while writing because they do not have strong formation base on English writing which lead them to have a lower level of writing proficiency than it should be. This finding is aligned with that obtained from the pre- questionnaires students' responses of their perceived level of writing proficiency who considered themselves "intermediate" to "beginners". However, the same results indicate that the number of errors among students varies greatly, i.e, some students make more errors than others. This is clearly mentioned in the table above which indicates that one student made 37 errors in the pre-test paragraph (the maximum number in one paragraph), while another student committed 22 errors in the pre-test paragraph and this justifies the high value of SD (10,60).

The Number of Pre-test Errors Per-Group. A thorough analysis of each group's sum, mean and SD of the number of errors was done and presented in the following table:

Table 10*Mean and SD of Number of Pre-test Errors Per-Group*

	Num	Sum	Minimum	Maximum	Mean	SD
CG Pre-test Errors	30	504	22	35	29,25	9,19
EG Pre-test Errors	30	497	26	37	31,5	7,76

As it is displayed in the table above, the sum of errors on the pre-test writings of the control group (CG) and the experimental group (EG) are (504 and 497), with means of (29,25 and 31,5) error per paragraph, respectively. These findings reported a noticeable convergence between the two groups' sum and mean of errors, this convergence justifies the low SD difference value between groups (0,98). This result may be due to the fact that the two groups were selected from a population of the same characteristics and environment, in addition to the sampling conditions of the present study.

Students' Pre-test Types of Errors. After being counted, students' pre-test errors were classified into different main types according to their frequency in students' writings, as shown in the following Table:

Table 11*Type of Errors in Students' Pre-test Writings*

Types of Errors	Num	Sum	Minimum	Maximum	Mean	SD
Grammatical Erros	60	480	6	16	20,96	7,07
Vocabulary Errors	60	199	8	13	14,12	3,53
Mechanical Errors	60	121	2	6	11,28	2,82
Content Errors	60	80	4	7	8,48	2,12
Cohesion Errors	60	52	2	4	5,64	1,41
Organizational Errors	60	41	4	6	4,6	1,41
Others	60	28	6	7	2,8	0,70

The data presented in the table above indicate that students made different types of errors in their pre-test writings with different levels of frequency. Almost half of the committed errors on students' pre-test writings are the "Grammatical" ones, (480 out of 1001) with a mean of 20,96 errors per paragraph. This mean is less representative since the SD is high (7,07). This indicates that there is an unbalanced distribution of the grammatical errors between the texts, while some texts contain few grammatical errors (minimum of 6 errors per paragraph), others contain many errors (maximum of 16 errors per paragraph). This high value of the mean number of errors confirms the (83%) of students' previously announced declaration, responding to the pre-questionnaire question about their most frequent committed types of errors, that the issues related to grammar such as verb tense, subject-verb agreement, word order, prepositions, articles..., are prevalent challenges which make them of low grammatical accuracy level and therefore of low writing proficiency level.

The second type of errors that frequently emerged in the students pre-test writings after the grammatical ones, was that of "Vocabulary", with a sum of 199 errors and a mean of 14,12 error per paragraph. This mean is also less representative since the SD value is relatively high (3,53), indicating variation in the number of vocabulary errors made by different students. Some students made as few as 8 errors, while others made as many as 13 errors. This finding confirms the previous students' claims that word choice is a common type of errors among them and that they struggle with selecting the right words and expressions to convey their ideas accurately.

The following repeatedly appeared type of errors in the pre-test texts was the "Mechanical type" with a sum of 121 errors, an average frequency of 11,28 error per paragraph and a SD of 2,82 which also reflects a moderate variation between students in making such type of errors (min 2, max 6). This means that students struggle with

punctuation, spelling, capitalization and indentation issues. These types of errors can obstruct text understanding and destructively impact the overall clarity and quality of the written work.

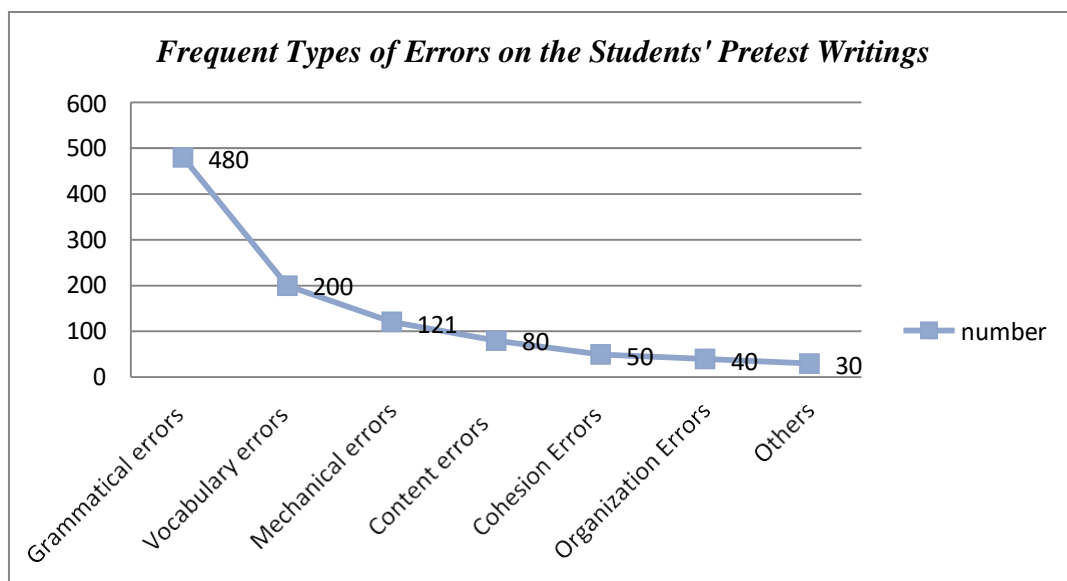
Content errors are less but notably frequent type of errors between students than the previous three ones with a mean of 8,48 error per text. This might indicate that while students struggle with language mechanics, they generally understand the content they are writing about. Also, the standard deviation of 2.12 shows relatively moderate variability among students in making content errors.

The other types of writing errors least frequently appeared within the 60 pre-test paragraphs are respectively “Cohesion errors” (Sum 52/M 5,64), and “Organization errors” (Sum 41/M 4,6). Yet, the relatively high SD in all the types of errors emphasizes that the pre-test written paragraphs are of variant levels of errors, consequently, students are of variant levels of proficiency. These findings are aligned with those obtained from the pre-experimental questionnaire when the students were asked about the types of errors committed by them. Additionally these were the mentioned areas of errors most targeted by the teachers’ feedback.

The following figure provides clearer representation of the level of frequency of each type of errors on students’ pre-test writings.

Figure 37

Frequency of each Type of Errors on the Students' Pre-test Writings



Types of Pre-test Errors Per-group. The different committed types of errors of both groups are analyzed separately so as to have an overview about the degree of convergence/divergence between them in terms of the appeared types of errors. The findings are presented in the following table:

Table 12

Type of Errors in Students' Pre-test Writings Per Group

	Num		Mean		SD	
	CG	EG	CG	EG	CG	EG
Grammatical Errors	230	250	21,9	20	7,07	6,36
Vocabulary Errors	119	81	14,24	14,01	2,12	2,82
Mechanical Errors	65	56	11,01	11,28	2,12	2,12
Content Errors	45	35	9,01	7,97	1,41	1,41
Cohesion Errors	15	35	5,19	6,1	2,12	1,41
Organization Errors	18	23	4,02	5,19	0,7	2,12
Others	13	17	3,12	2,5	1,41	0,7

According to the presented findings, grammatical errors are the most frequent ones in both groups' pre-test writings. Students in the CG committed lower but not far number of

grammatical errors from those made by the EG (230, 250), respectively, with close mean values of 21,9 and 20 errors per text, and SD values of (7,07 and 6,36), which are considerably high indicating that students in both groups symmetrically struggle with grammatical difficulties.

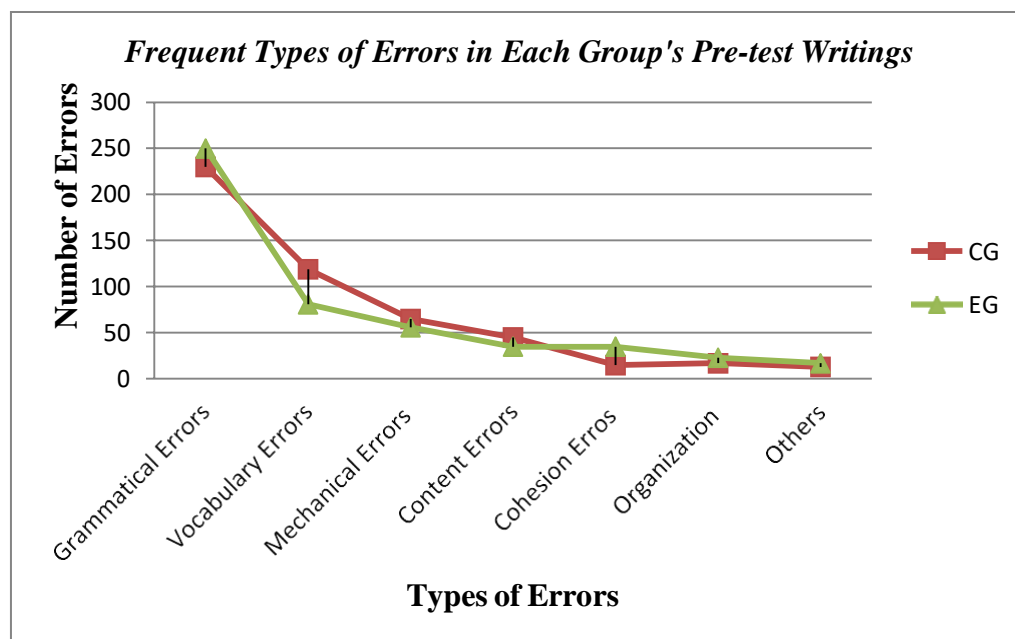
Vocabulary errors are the next noticeable common ones among students of both groups with close means of 14,24 and 14,01 (mean difference of 0,23) and SD values of 2,82 and 2,12 respectively. These close and relatively high SD values indicate that students of both groups similarly suffer from vocabulary related issues with different degrees (some students within the same group make fewer errors than others).

Additionally, students of both groups made mechanical errors with means of (11,01 and 11,28) respectively, with similar SD value of 2,12. The relatively high value of the SD render these means less representative which also indicate similar between-groups appearance of mechanical errors and different within-groups appearance since one paragraph may contain more errors of the same type than another one in the same group.

The other pre-test appeared errors in both groups' writings are those related to content, cohesion, and organization respectively, with a notable convergence between groups as it is clear in the table above. The following figure provides clearer representation of the level of frequency of each type of errors on each group's pre-test writings.

Figure 38

Frequent Types of Errors in Each Group's Pre-test Writings



Students Pre-test Scores and Levels

The last step in the analysis of the pre-test findings aims to have an overview students' scores and writing proficiency level in the first phase of the experiment prior to any exposure to any corrective feedback.

Students' Scores on the Pre-test. The mean scores of the students on the pre-test were recorded and presented in the following table:

Table 13

Mean and SD of All Students' Pre-test Scores

	Num	Mean	Min	Max	SD	Mode
Pre-test Scores	60	9	2	16	9,89	8

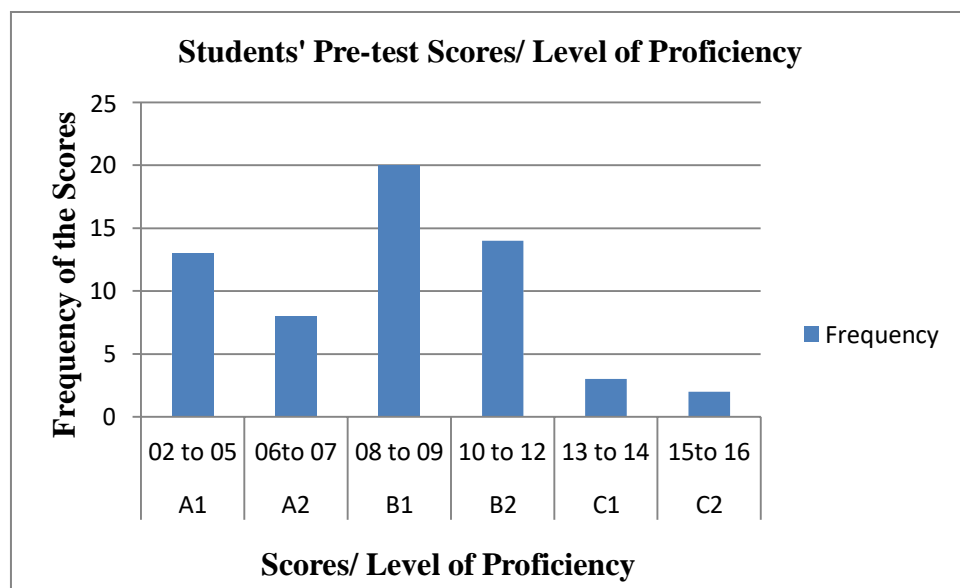
As mentioned in the table above, students' pre-test scores range between 02/20 points and 16/20 points with a mean of 9/20 points. This mean shows that students' writing level in the pre-test varies from one student to another. This is confirmed by the SD value between the

scores of the students which is relatively high (9,89). This is an expected result since the sample of the study includes students of different levels as explained and justified in the previous chapter (sampling section). This finding helps us to assess the effect of the ACF intervention on students of different levels.

To have a clearer representation of the students' writing proficiency level at the beginning of the study, the researcher adopted another way of their presentation that depends on students scores classification into six-level scale (the same CEFR level scale representation explained previously in chapter three), namely, Beginner level (A1-A2), Intermediate level (B1-B2), and advanced Level (C1-C2). More precisely, students whose scores range between (02 to 05) were considered *lower beginners* (Belong to A1 Level), and those whose scores range between (06 and 07) were considered *upper beginners* (belong to A2 level). As for the intermediate students, those who obtained scores from (8 to 9) are classified as *lower intermediate* students (belong B1 level), while the students who obtained scores from (10 to 12) are classified as *upper intermediate* (belong to B2 level). Advanced students are categorized into *lower advanced* (belong to C1), their score were between 12 and 13, and *upper advanced* (belonged to C2), their score were between (14 and 16). The results are shown in the figure bellow:

Figure 39

Students' Level of Proficiency in the Pre-test



The figure above mentions the distribution of students' pretest scores between the different levels of proficiency. The majority of the pretest scores (20 students) range between (8 to 09), this means that the majority of the students are *lower intermediate* students, followed by 14 student whose scores range between (10 to 12), i.e the students of *upper intermediate level*. This suggests that utmost the half number of students (34 out of 60) belonged to “*the intermediate*” level of writing proficiency with a more prevalence of the “*lower intermediate*” students.

The next level which includes more frequent scores was the “*beginner*” level. 13 students belong to the *lower beginner* level with scores range between (02 and 05), followed by 08 students who belonged to the *upper beginner* level with score range between (6 and 7). This indicates that 21 out of 60 students are *beginners* in writing.

A minority of 05 students' pretest scores belong to the “*advanced*” level., three (03) students of had scores between (13 and 14), these are considered as *lower advanced* students and only 2 students had scores range between (15 and 16), they were considered *upper advanced* students.

These results go in line with those obtained from the students' responses on the questionnaire about their self- perceived level in English writing where they perceived themselves as *intermediate to beginner* students.

Students' Pre-test Scores Per-group. After assessing the overall level of writing proficiency of all the participants in the pretest phase, the mean scores of the (CG) students and the (EG) students are counted and assessed each separately. The aim behind this step is to compare between the two groups' writing proficiency level prior any intervention in order to use the obtained results as base data to examine and to compare the variability of score/level between the groups and within the groups across the experimental phases.

As it is evident in the table bellow, the mean scores of the CG and the EG students on the pretest prior to any intervention is 9 points in both groups, with SD values of 9,98 and 9,19 respectively. This convergence between the means and SD values of both groups indicates that they are very close in their level of writing proficiency in the pre-experimental phase.

Table 14

Mean and SD of Students' Pre-test Scores Per Group

	Num	Mean	Min	Max	SD	Mode
CG Pre-test Scores	30	9	2	16	9,98	8
EG Pre-test Scores	30	9	2	15	9,19	9

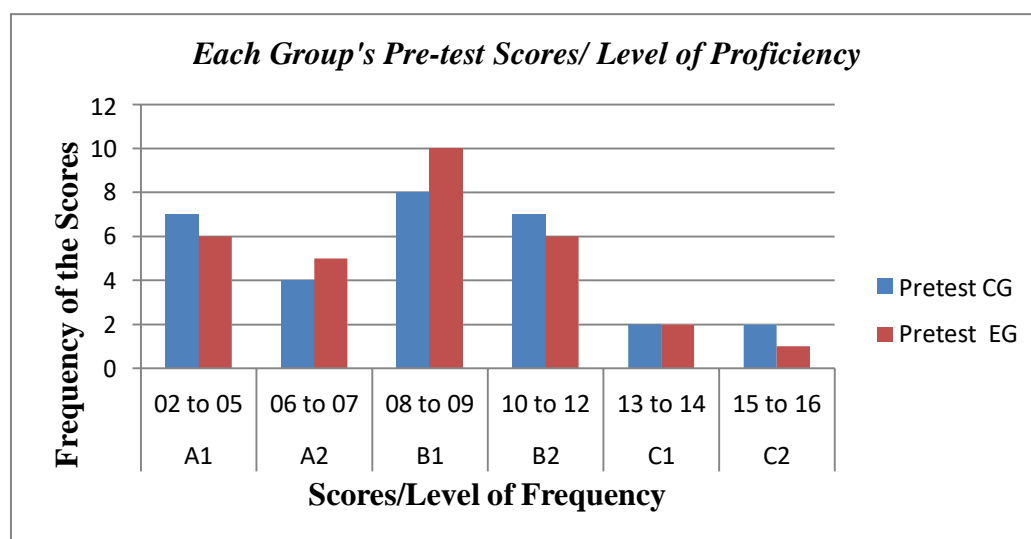
Based on the between-groups comparison of the students' pretest writing proficiency level we can conclude that there is a *homogeneity* between the CG and the EG indicating that the two groups are of symmetric writing ability at the beginning of the study. This result may be due to the sampling method which aimed to create a homogenous atmosphere to reduce any effects of any factor that is not the subject of study. So, any change in the students, number of

errors, scores, and levels will be resulted from the intervention of automated corrective feedback (WIF).

Students' Pretest Writing Proficiency Level Per-group. The pre-test scores of each group are classified according to the level of proficiency in which they belong following the same previously explained procedure as presented in the following figure:

Figure 40

Students' Writing Proficiency Level in the Pre-test



The figure above mentions groups-balance regarding the writing proficiency level of students' belong to them since the students' levels in the two groups are very close. The students' of the CG and the EG are "*intermediate to beginner*" students with an almost identical distribution. Also, the minority advanced students are fairly distributed between the two groups

To conclude, the findings obtained from the exploration of the students' pretest writing proficiency level revealed that these students make numerous errors of different types while writing. It is also found that they have a lower intermediate to beginner level of proficiency. These findings emphasize the existence of a lacuna in the instruction of EFL writing, which can be filled through the execution of alternative effective instructional strategies that

encourage students to be proactive elements in their learning, assist themselves to solve the existing problems, ameliorate their level and create a learner-centered educational environment which has become a necessity. In this context, the researcher proposed that the implementation of ACF (WIF) in the intervention phase of the experiment can make the difference students' writing proficiency level which will be tested and assessed later in the posttest phase, and then it will be compared with the pretest results to draw conclusions about its effectiveness in improving EFL learners' writing skills.

The Results of the Post-test

After participating in the pre-experiment questionnaire and the pre-test, the 30 students of the experimental group (S31-S60) engaged in an intervention phase of four weeks (8 sessions) within which they implemented the automated corrective feedback tool "Write & Improve" in their writing classes. After the intervention phase, these students were post-tested so as to assess their writing proficiency level in order to have insights about the actual effectiveness of (WIF) on their writing proficiency improvement. The analysis of the post test findings also focused on the students' number of errors, types of these errors, students' scores and their writing proficiency level in this phase. Hence, the results are presented and analyzed as follows:

Students' Post-test Number and Types of Errors

In order to examine the number and types of students' errors on the post-test phase, the mean number of all errors and the mean of each type of errors of all the students together and those of each group alone were counted and recorded as it is be presented in the following sections.

Mean Number and SD of All Students' Post-test Errors. The errors emerged in the students' post-test writings after the implementation of WIF are counted and their sum of numbers, mean and SD are presented in the following table:

Table 15

Mean and SD of Number of Errors in students' Post-test Writings

	Num	Sum	Min	Max	Mean	SD
Post-test Errors	60	565	8	18	15,25	7.07

As it is noticed in the table above, the sum of errors committed by the students in the post-test is 565 errors within 60 paragraphs of 90-110 words with a mean of 15,25 errors per paragraph. The SD value is relatively high (7,07) which indicates that the students have different writing levels since one student made only 8 errors in his paragraph, while another committed 18 errors which makes the mean value less representative of the whole sample. Consequently, so as to get deeper insights on students' post-test errors, the researcher sought to analyze the number of errors on the post-test of each group separately, the results are as follows:

Number of Post-test Errors Per-group. The sum, mean number and SD of errors of each group alone on the post-test phase were counted and represented in the following table:

Table 16

Mean and SD of Post-test Errors Per-group

	Num	Sum	Minimum	Maximum	Mean	SD
CG Post-test Errors	30	400	12	18	20	4,24
EG Post-test Errors	30	165	8	13	10,5	2,82

It is noticeable that the reported sum of CG errors in the post-test was 400 errors with a mean of 20 errors per paragraph. The SD value is relatively high (4,24), which suggests that the CG group includes students with different levels of writing proficiency, one of them produced 12 errors per text while the other made 18 errors per text. It is worth noting that the

sum number of errors committed by the CG in the post-test phase (400 errors) represents approximately three quarters of the whole number of errors (565 errors)) in this phase.

As for the results of EG students related to the sum, mean and SD of their errors in the post-test writings, the sum of errors was only 165 errors within 30 paragraphs of 90-110 words, with a mean number of 10,5 errors per paragraph and a SD of 2,82. Yet, the SD is relatively high which is reflected in the lowest and highest number of errors in students' paragraphs, as it is clear some participants made a considerable number of errors (13 errors) while others committed only 8 errors, which makes the SD value high and the representation of the mean value low. The sum number of the EG students in the post-test phase represents about a quarter of the total number of error in this phase (165 out of 565).

Students' Post-test Types of Errors. After being counted, students' post-test errors were also classified into different main types according to their level of frequency in the students' writings, as recorded in the following table:

Table 17

Students' Post-test Types of Errors

Types of Errors	Num	Sum	Min	Max	Mean	SD
Grammatical Errors	60	300	5	12	12,2	4,94
Vocabulary Errors	60	80	5	10	7,6	3,53
Mechanical Errors	60	45	3	4	1,2	0,70
Content Errors	60	55	4	8	4,24	2,82
Cohesion Errors	60	45	4	7	3,33	2,12
Organization Errors	60	25	2	6	2,3	2,82
Others	60	15	1	2	1,2	0,70

As presented in the table above, *grammatical errors* are still the most frequent type of errors in students' post-test writings with a sum of 300 errors and a mean of 12,2 errors per paragraph. The high value of SD (4,94) reflects the existence of students of different level of grammatical accuracy, since one of them committed a minimum number of grammatical errors of 5 errors in his post-test writing, while another made 12 grammatical errors.

As for *Vocabulary errors*, 80 errors were found in the 60 analyzed paragraphs with a mean of 7,6 errors per text and a SD value of 3,5 errors. Yet, this relatively high value of SD indicates that vocabulary errors are distributed unfairly between students' writing since one text contains 5 vocabulary errors, whereas another text contains 10 errors.

The following most frequent type of errors in the post-test writings of students were the content related errors with a sum of 55 errors and a mean of 4,24 content-related error per paragraph. The SD value was 2,82 which is considerably high reflecting the low representation of the mean number to all the students, this is clearly represented in the difference between the minimum and maximum number of content errors between students (min 4, max 8).

As far as the students' post-test errors related to cohesion and organization types, these are found in the students' writings with sums of 45 and 25 errors respectively with means of 3,33 and 2,3 errors per text. Yet, the relatively high values of SD in both types (2,12 and 2,82) respectively, emphasized that these types of errors are not fairly distributed among the students' writings which means that these means of errors are less representative to all the participants.

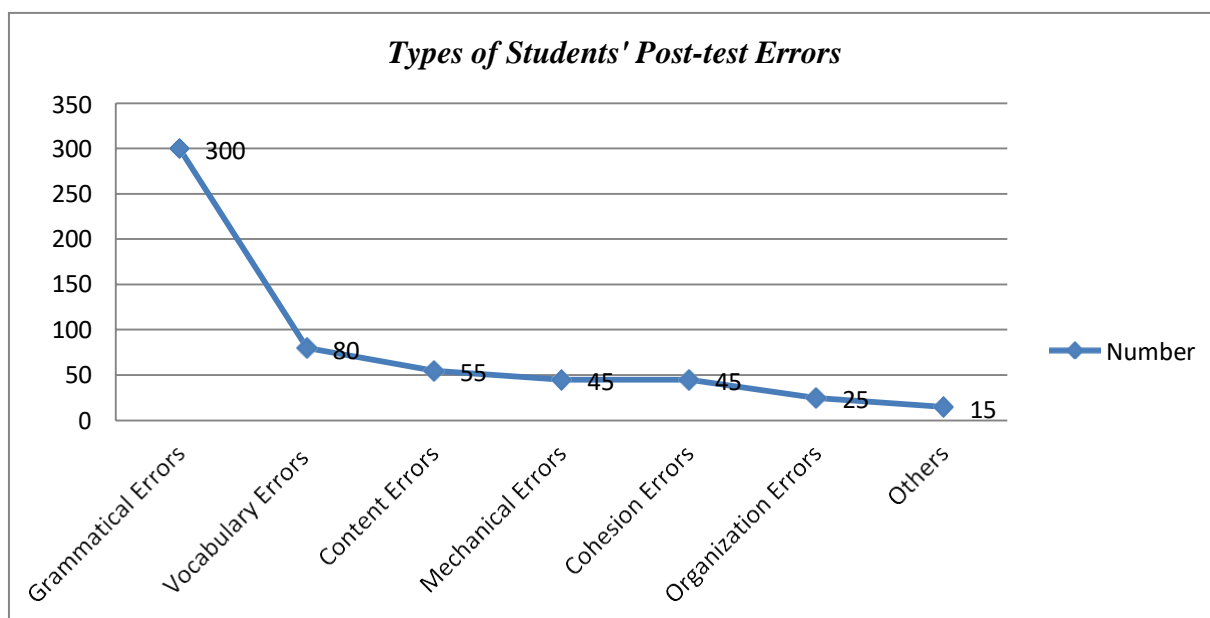
Concerning the mechanical errors, students' writings in the post-test witnessed a noticeable decrease in the number of mechanical errors, as they recorded only 45 errors distributed over 60 paragraphs at a rate of 1,2 error per text, with a low SD value of 0,7 errors, which makes the mean value representative to all the participants.

Other least frequently appeared types of errors in students' post-test writings were found with a sum of 15 errors and a mean of 1,2 error per text. The SD value of these types is low of 0,7 errors, which reflects the balanced appearance of these types of errors among the students' post-test writings.

Clearer details about the frequency of each type of the emerged errors on the students' post-test writings were presented in the following figure:

Figure 41

Types of Errors on the Students' Post-test Writings



These findings revealed that students' still commit different types of errors with different degrees of frequency in the post test phase. Further analyses were done to explore the types of errors spotted in of each group's writings in the post-test, separately.

Types of Post-test Errors Per-group. The different appeared types of errors in each group's writings were recorded and analyzed separately so as to have deeper insights about which type of post-test errors appear most frequently in each group. the findings are recorded in the following table:

Table 18*Types of Post-test Errors Per-group*

	Sum		Mean		SD	
	CG	EG	CG	EG	CG	EG
Grammatical Errors	210	90	16,39	8,01	3,53	2,82
Vocabulary Errors	65	15	10,19	5,01	2,12	2,12
Mechanical Errors	40	5	1,4	1,01	1,41	0,7
Content Errors	35	20	6,48	2,01	3,53	1,41
Cohesion Errors	30	15	4,18	2,48	2,82	2,12
Organization Errors	13	12	3,04	1,6	3,53	1,41
Others	7	8	1,4	1,01	1,41	0,7

The recorded findings in the table above indicate that *grammatical errors* are the most frequent type of errors in both groups' post-test writings. However, a majority of two thirds of the grammatical errors (210 out of 300) were found in the CG students' writings with a mean number of 16,39 grammatical error per text, while the rest 90 of the grammatical errors were found in the EG students' post-test writings with a mean of 8,01 errors per text. The SD values of the grammatical errors of both groups are relatively high (3,53 and 2,82) respectively, which means that both groups include students of variant grammatical accuracy levels.

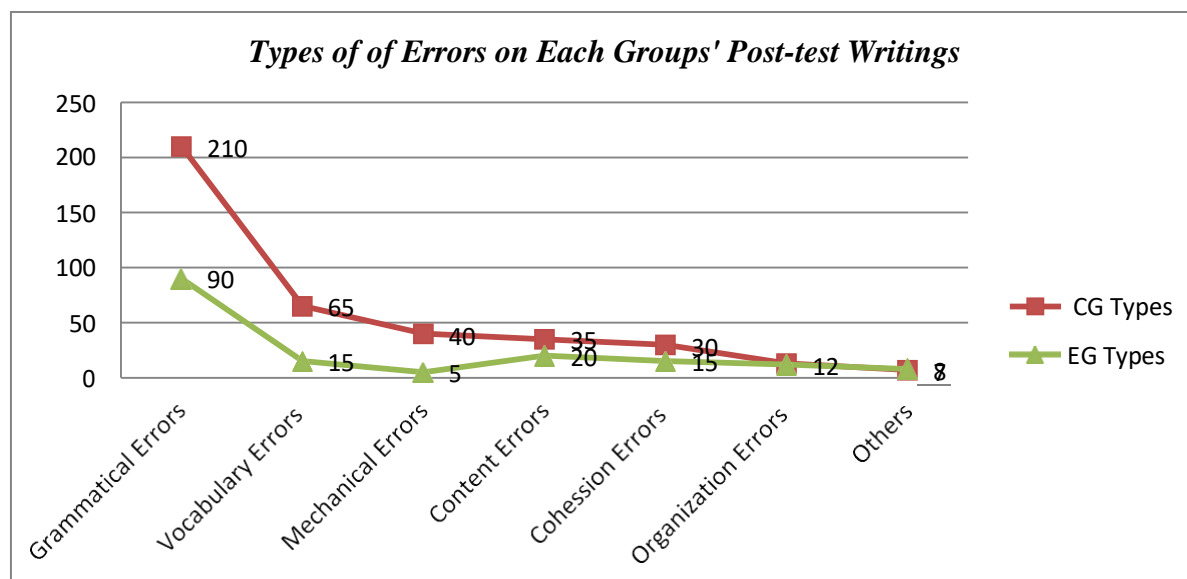
The second most frequent type of errors in both groups' post-test writings is that related to *vocabulary errors*. Three quarters of the vocabulary errors (65 out of 80) were committed by the students of the CG with a mean of 10,19 errors per text, while students in the EG produced only 15 vocabulary errors with a mean of 5,01 errors per text. The SD values of errors in both groups is identical (2,12) which reflects that vocabulary errors in both groups were distributed unfairly between students which makes the mean value less representative to the whole population of each group.

The next considerably present errors in both groups' post-test writings were the *content* related errors. Almost two thirds of the sum number of content errors (35 out of 55) in the post-test writings are caused by the CG students with a mean of 6,48 content error per text and a SD value of 3,53 errors. This relatively high value of SD means that there is a disparity in the number of content errors within the students of the CG which makes the mean value of content errors less representative. However, EG students made only 15 content-related errors out of 55, with a mean of 2,01 errors per text and a SD value of 1,41. The relatively low SD value reflects the relative representation of the mean number of all the students of the EG.

Additionally, almost all the mechanical errors appeared on the post-test writings (40 out of 45) were made by CG students with a mean of 1,41 error per text and a SD value of 1,41 errors. The rest 5 errors were made by EG students with a mean of 1,01 and a SD of 0,7 errors. These results indicate that EG writings are almost free from mechanical errors.

Other types of post-test errors which are committed by the students of both groups were those related to cohesion. In the writings of the CG students there were two-thirds of cohesion-related errors (30 out of 45) with a mean of 4,18 and a SD value of 2,82. This means that CG students still face cohesion-related errors.

Concerning organization errors students of CG and EG made approximately the same number of organization errors (13 out 12) errors respectively with means of 3,04 and 3,53 and SD values of 1,41 and 0,7 respectively. The following figure provides clearer representation of the level of frequency of each type of errors on each group's pre-test writings.

Figure 42*Types of Post-test Errors Per-group****Students' Post-test Scores and Levels***

The last step in the analysis of the post-test findings aims to have an overview of students' scores and writing proficiency level in the post-test phase of the experiment after the intervention of WIF in their writing classes.

Students' Scores on the Post-test. The mean scores of the students on the post-test were recorded and presented in the following table:

Table 19*Mean and SD of All Students' Post-test Scores*

	Num	Mean	Min	Max	SD	Mode
Students' Post-test Scores	60	10	2	16	9,89	11

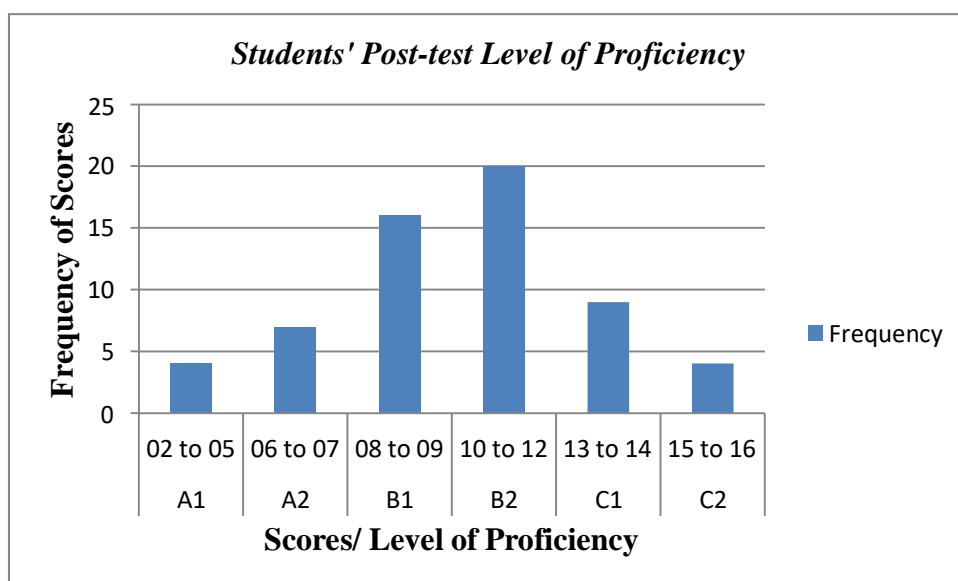
As mentioned in the table above, students' post-test scores range between 02/20 and 16/20 points, with a mean of 10/20 points and SD value of 9,89 points, which indicates that these scores are unevenly distributed among the students and this reflects differences in their levels, i.e, even after the intervention phase, students still have different writing levels. Also

the mode point is 11/20 revealed that in the post-test phase the majority of the students belong to the “*upper intermediate*” level of writing proficiency.

To have clearer insights on students’ writing proficiency levels in the last phase of the experiment, their scores were also classified into the CEFR six-levels scale in the same way done in the pre-phase. The results were shown in the figure below:

Figure 43

Students’ Post test Level of Proficiency



The figure above mentions the distribution of students’ post test scores between the different levels of writing proficiency. The majority of the post-test scores of 20 students range between (10 to 12 points), this means that the majority of the students are upper intermediate students, followed by 16 students whose scores range between (08 to 09 points), i.e the students of *lower intermediate*. This suggests that in the posttest phase, 36 students out of 60 belong to the intermediate level with a majority of *upper intermediate* ones.

The next level which includes more frequent scores in the post-test level was the “*advanced*” which includes the scores of 13 students. The majority of 09 students’ scores range between (13 and 14 points) which means that these students belong to the lower advanced level of writing proficiency, followed by 4 students whose scores range between 15

and 16, i.e, these students belong to the “*upper advanced*” level. These findings suggest that in the posttest phase, 13 students out of 60 are advanced students with a majority among them who were “*lower advanced*” ones.

The rest of the students (11) belong to the “*beginner*” level. The scores of 07 of them range between (6 and 7 points), which means that they belong to the “*upper beginner*” level, while the scores of 04 of them range between (2 and 5 points) which indicates that they are “*lower beginner*” students.

These findings about students’ scores and levels of writing proficiency in the posttest phase indicate that the participants overall level improved from being “*intermediate to beginners*” to being “*intermediate to advanced*” students.

Students’ Post-test Scores/ Level of Writing Proficiency Per Group. After measuring all the students’ scores and assessing their overall level of proficiency level in the post-test, the mean scores of the students of each group alone are counted, assessed and classified separately. The aim of this step is to find out any differences between the level of students of two groups after the intervention phase in order to use the obtained results as base data to explore make decisions about the effect of WIF on students’ writing proficiency. The findings were recorded in the following table:

Table 20

Students’ Post-test Scores/ Level of Writing Proficiency Per Group.

	Num	Mean	Min	Max	SD	Mode
CG Pre-test Scores	30	9	2	16	9,89	8
EG Pre-test Scores	30	11	8	16	5,65	11

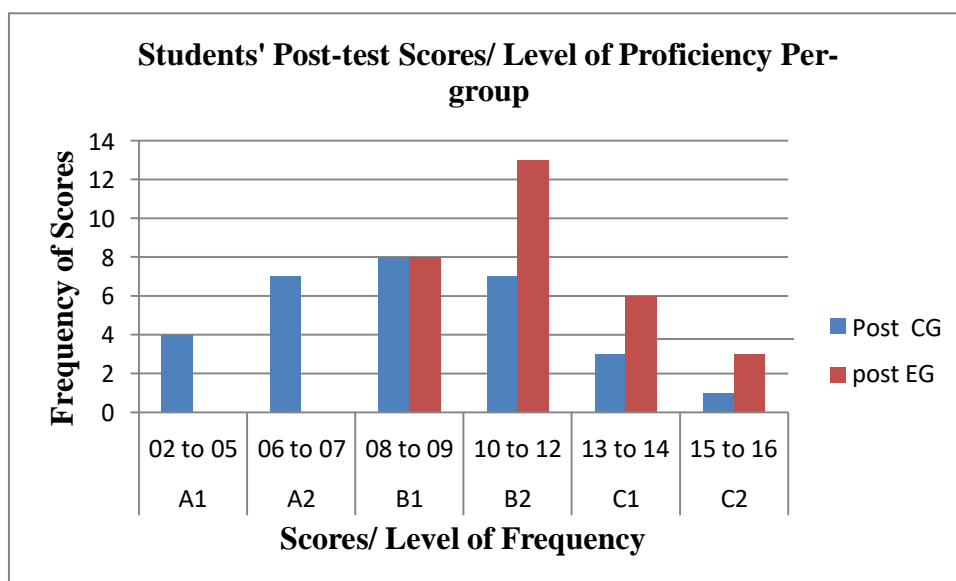
As it is noticed in the table above, CG students' post test scores range between 02/20 and 16/20 points with a mean score of 09/20 points per student, and a high SD value of 9,98 which indicates that these scores are unfairly distributed among students and this reflects differences in the CG students' levels in the post test phase. The mode score of 08/20 reflects that the majority of the CG students in the posttest phase belong to the *lower intermediate* level of writing proficiency.

The findings also revealed that EG students' post test scores range between 8/20 and 16/20 points with a mean score of 11/20 points per student, and SD value of 5,65 points. This relatively high value of SD is justified by the minimum score of 08/20 points and the maximum score of 16/20 which indicates that the EG students are of different writing proficiency levels. The mode score of 11/20 indicates that the majority of the EG students in the post test phase belong to the upper intermediate level of Writing proficiency.

To have clearer insights on students' writing proficiency levels in the last phase of the experiment, their scores are were also classified into the CEFR six-levels scale in the same way done in the pre-phase. The results were shown in the figure bellow:

Figure 44

Students' Post test Scores/Level of Proficiency Per-group



As mentioned in the figure above, the majority of the CG students (15 out of 30 students) had scores range between (8 and 12) which means that in the post-test phase, half of the CG students belong to the “intermediate” level. Eight students of them had scores range between (8 and 9 points) which means that these are of “*lower intermediate*” level, while seven (07) students had scores range between (10 and 12) which means that they are of “*upper-intermediate*” level.

The next majority of CG students (11 out of 30) had scores range between (02 and 07 points) which means that almost one third of the CG group students belong to the “*beginner*” level. Seven students of them had scores range between (06 and 07 points), which indicates that they are of an upper beginner level, while four of them had scores range between 02 and 05 points which means that these students belong to the “*lower-beginner*” level of writing proficiency.

A minority of 4 students from the CG had posttest scores that range between (13 and 16 points) which means that they are of “*advanced*” level. Three of them their score range between (13 and 14 points) which means that they belong to the lower-advanced level, while only one (01) student had 16/20 score which indicated that he is an “*upper-advanced*” student.

As far as the EC students’ writing proficiency level, it is clear from the figure above that these students are either intermediate or advanced students since there are no EG students who belong to the beginner level. Moreover, it is noticed that two-halves of the students (21 out of 30 students), had scores range between (08 and 12 points), which mean that they are “intermediate” students in writing with a majority of 13 students whose scores range from (10 to 12 points), which indicated that the majority of them are “*upper-intermediate*” students, while seven (08) of them had scores range between (8 and 09 points) which means that they are of “*lower-intermediate*” level of writing proficiency.

The rest of the students (09 out of 30 students), had scores range between (13 and 16 points) which means that they belong to the “advanced” level, with a majority of 06 students of them had scores range between (13 and 14 points) reflecting their “*lower-advanced*” level of writing proficiency, while 3 of them had scores between (15 and 16) indicating that they are of “*upper-advanced*” level.

According to these findings we can conclude that on the one hand, the overall CG students’ writing proficiency level in the post-test phase ranged between “*lower-intermediate*” and “*upper-beginner*” levels of writing proficiency. On the other hand, the overall EG students’ writing proficiency level in the post-test phase ranged between the “*upper-intermediate*” to the “*lower-advanced*” level of writing proficiency.

Comparative Evaluation of the Quasi-Experiment Results

After being recorded, analyzed and interpreted separately, the findings of the pre-test and post test phases were compared in order to decide whether there is or not any improvements in students’ overall writing proficiency, via comparing students’ number of errors, types of the produced errors, and the obtained scores before and after the intervention of WIF in their writing classes. Between-groups and within-groups comparisons were done in order to examine the variability of the results between the groups and within each group across the two experimental phases. The obtained findings from these comparisons will confirm or reject the study’s hypotheses regarding the effect of the WIF on students’ writing development.

Between-Groups Comparisons of Students’ Pre-test and Post-test Number of Errors

In order to gain deeper insights about the differences between students’ number of errors within each phase, the results of the CG and EG number of errors within the pre-test phase and the post-test phase were compared. The objective behind this comparison is to investigate the similarities/ differences between the students’ of both groups in terms of

number of errors before and after the intervention of WIF. The table and the figure below illustrate clearly the similarities/ differences of students' number of errors within the pre-test and post-test phases.

Table 21

Between-Groups Comparisons of Students' Pre-test and Post-test Number of Errors

	Pre-tes Errors			Post test Errors		
	Sum	Mean	SD	Sum	Mean	SD
CG Errors	504	29,25	9,19	400	20	4,24
EG Errors	497	31,5	7,76	165	10,5	2,82
Difference	7	2,25	1,41	235	9,5	1,41

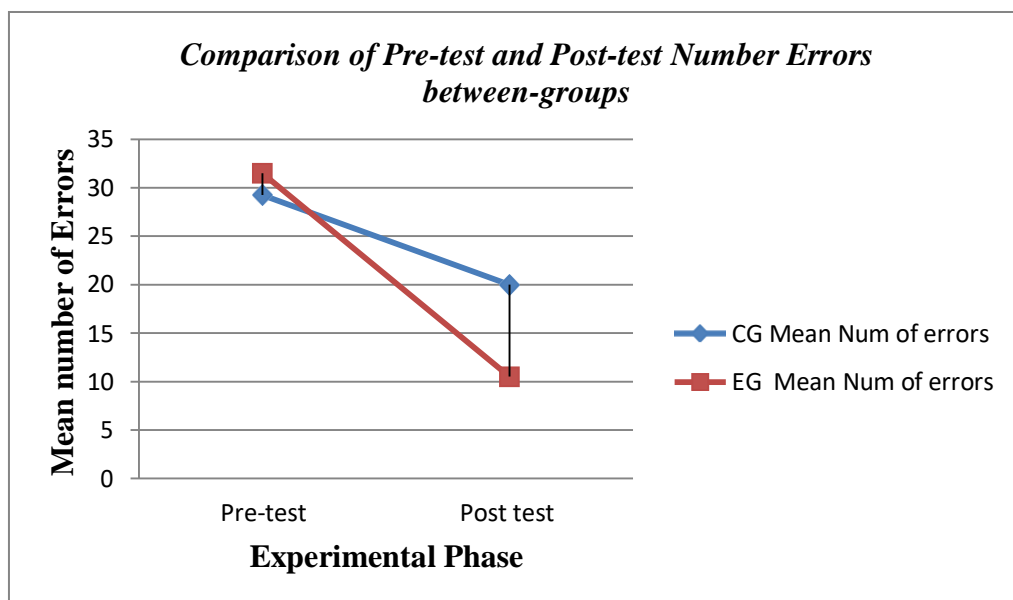
As it is evident in the table above, in the pre-test phase, the sum number of errors of the CG and EG are 504 and 407 errors per group respectively, with a difference of only 7 errors. Additionally, The mean number of errors of the CG and the EG were 29,25 and 31,5 respectively with a difference of 2,25 error per text. Accordingly, the mean number of the CG and the EG groups are very close. This means that there is a *homogeneity* between the two groups at the outset of the study in terms of their number of errors which reflects a symmetric writing ability in the pre-experimental phase. This result may due to the fact that the two groups were purposefully sampled from a population of the same characteristics and environment so as to avoid any effect of any extra factors which are not under study. Thus, any change in the number of errors will be caused by the intervention of WIF.

In the post-test phase, the sum number of errors of the CG and the EG are 400 and 165 errors per group respectively, with a difference of 235 errors. Furthermore, the mean number of errors of the CG and the EG group are 20 and 10,5 with a difference of 9,5 error per text. We can notice a large between-groups disparity in the mean number of errors in this phase.

This means that the between groups convergence in the mean number of errors in the pre-test phase did not remain stable in the post-test phase before which EG students' receive WIF.

Figure 45

Between-Groups Comparisons of the Pre-test and Post-test Number of Errors



The findings of the between-groups comparisons indicated that there were significant differences between groups in the post-test phase corresponding to the intervention of WIF which reflects an effective positive interaction between WIF and the number of errors which was considerably reduced in the post-test phase.

Within-Groups Comparisons of Students' Pre-test and Post-test Number of Errors

After examining between-groups differences in the mean number of errors on each experimental phase, another set of within groups comparisons were conducted so as to further explore the existence of significant differences within each group through the two experimental phases, i.e, to examine the effect of WIF intervention on students' errors minimization.

Comparing Students' Pre-test and Post-test Number of errors. The mean number of errors of all participants in the pre-test and the post-test were compared and the differences between them were analyzed. The results of the comparison were displayed in the following table:

Table 22

The Comparison of Students' Pre-test and Post-test Number of errors

	Phases	Sum	Mean	SD
Students' Number of Errors	Pre-test	1001	30,3	10,6
	Post-test	565	15,25	7,07
	differences	436	15,05	3,53

As it is noticed in the table above, students in the post-test committed lower number of errors (565), approximately half of the appeared errors on their pre-test writings (1001), with a difference of 436 errors. Furthermore, the mean value of the number of errors decreased notably from 30,3 errors per text in the pre-test to 15,25 errors per text in the post test with a mean difference of 15,05 errors, which reflects a noticeable reduction of errors. Additionally, the SD value has reduced from 10,6 in the pre-test to 7,07 in the post-test with a SD value difference of 3,53 which reflects improvements in students' writing proficiency since the differences between their individual errors have been reduced. Accordingly, the findings of the comparisons of the students' mean number of errors across the phases revealed that there were significant differences between- phases corresponding to the intervention of WIF before the post-test phase. These significant between-phases differences in the mean number of errors of all the students indicates an improvement in their writing proficiency level and decline in the number of errors which reflects *an effective interaction between WIF and students' number of errors.*

Yet, so as to better evaluate the differences in students' number of errors across the phases, within CG group and EG group comparisons of these means across the phases were conducted as follows:

Comparing CG Students' pre-test and post-test Number of Errors. A within-group comparison of the CG students' number of errors between the pre-test and the post-test phases was done. It is worth noting that these students did not receive WIF, so any loss in the number of errors may due to other factors which are not under study. The results of this comparison are reported in the following table

Table 23

The Comparison of CG Students' pre-test and post-test Number of Errors

	Phases	Sum	Mean	SD
CG Nmbor of Errors	Pre-test	504	29,25	9,19
	Post-test	400	20	4,24
	Difference	104	9,25	4,95

As reported in the in the table above, the findings of the comparison of the pre-test and post-test CG students' number of errors revealed a slight reduction in the number of errors from 504 errors in the pre-test to 400 errors in the post test with a difference of 104 errors. This means that the students of the CG maintained almost the same errors and did not achieve noticeable improvement since their number of errors on the posttest phase forms approximately three quarters of the total number of errors (400 out of 565). Moreover, the mean number of errors has decreased from 29,25 error per text in the pretest phase to 20 errors per text in the post test phase with a mean difference of 9,25. Additionally, the SD value of the number of errors has also dropped from 9,19 in the pre-test phase to 4,24 in the post-test phase with a SD value difference of 4,94 which reflects relative but not significant

loss of errors between the phases. These slight reductions in the mean number of errors of the control group across the pre-test and the post-test phases may be due to other influencing factors such as students' self-feedback, teachers' feedback or the repeated writing practices.

Comparing EG Students' pre-test and post-test Number of Errors. A within-group comparison of the EG students' number of errors between the pre-test and the post-test phases was conducted. It is worth noting that these students receive WIF during the intervention phase, so any loss in the number of errors is suggested to be due to this intervention. The results of this comparison are reported in the following table

Table 24

The Comparison of EG Students' pre-test and post-test Number of Errors

	Phases	Sum	Mean	SD
EG Number of Errors	Pre-test	497	31,5	7,76
	Post-test	165	10,5	2,82
	Difference	332	20	4,94

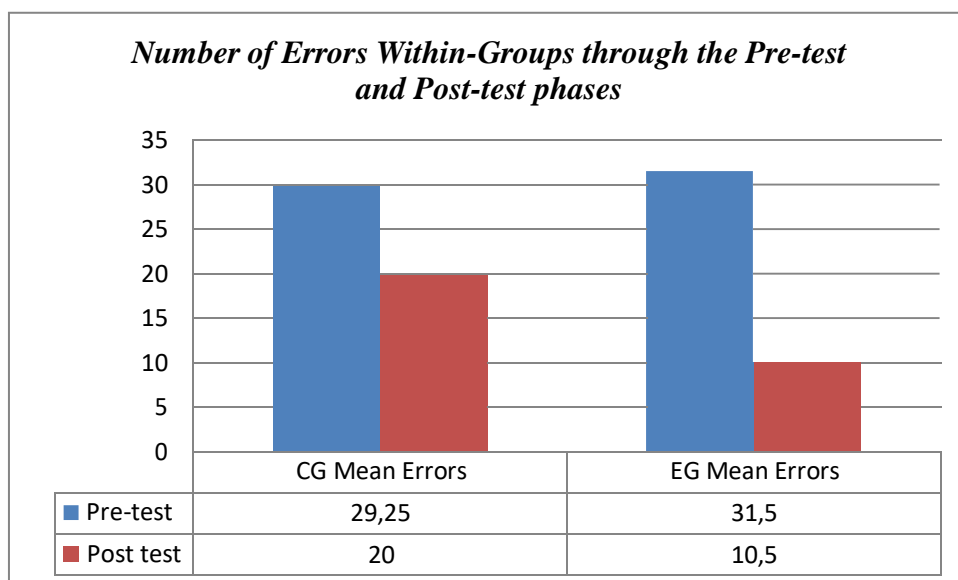
According to the displayed findings in the table above, the number of errors of the EG students witnessed a considerable diminution between the pre-test and the post-test phases in comparison to the CG. It has reduced from 497 errors in the pre-test (before WIF intervention) to 165 errors in the post-test (after the WIF intervention) with a difference of 332 errors. Additionally, the mean number of errors has dropped from 31,5 errors per text in the pre-test phase to 10,5 errors per text in the post-test phase with a mean difference of 20 errors per text. Moreover, the SD value has also reduced from 7,76 errors in the pre-test to 2,82 errors in the post-test reflecting improvements in the EG students' writing proficiency level since their number of errors has decreased and the SD value of errors loss is distributed relatively among them in approximately the same way. Accordingly, the comparison of EG

students' number of errors through the phases demonstrated significant differences within EG in the number of errors. Therefore, there is a significant effect of interaction between WIF and number of errors. These findings mentioned that the mean number of errors varies significantly within EG through the two tests phases.

Within-groups comparisons of the mean number of errors between the pre-test and the Post-test phases were further clarified in the following Figure:

Figure 46

Number of Errors Within-groups through the phases



Students' number of errors loss reflects their writing improvement, the fewer they produce errors, the better they ameliorate their writing proficiency. The statistical analysis of the obtained results from between-groups and within-groups comparisons proved the occurrence of significant differences in the mean number of errors between the CG which achieved only slight improvement through the experimental phases, and those of the EG which recorded considerable minimization in the number of errors after the intervention of WIF, therefore they realized important improvements in their writing proficiency level. Accordingly, we can conclude that there was a main effect of WIF on students' writing proficiency improvement.

Between-Groups Comparisons of Students' Pre-test and Post-test Types of Errors

In order to have a clearer overview about the differences between students' types of errors within each phase, the results of the CG and EG types of errors within the pre-test phase and the post-test phase were compared. The objective behind this comparison is to investigate the similarities/ differences between the students' of both groups in terms of types of errors before and after the intervention of WIF. The table and the figure bellow illustrate clearly the similarities/ differences of students' types of errors within the pre-test and post-test phases.

Table 25

Between-Groups Comparisons of Students' Pre-test and Post-test Types of Errors

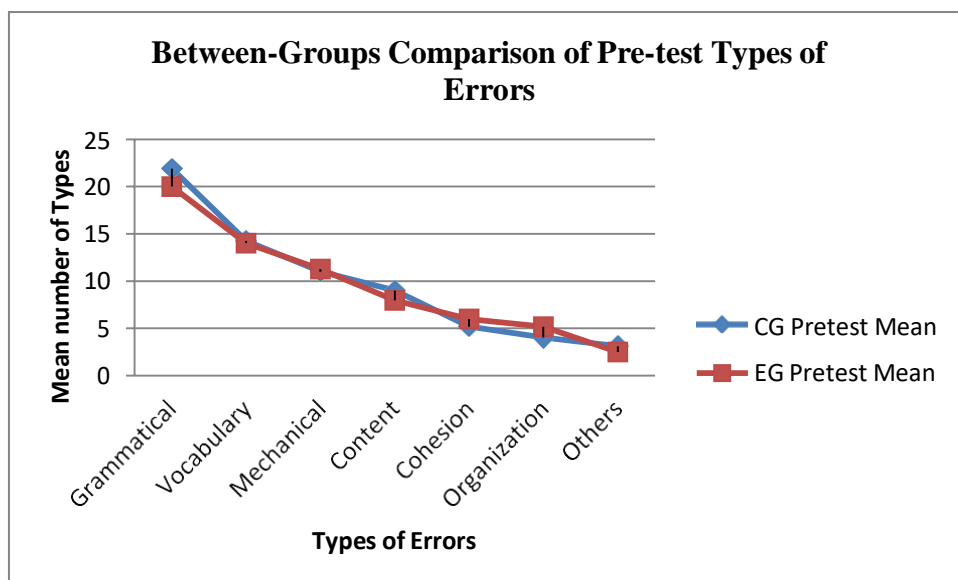
Types of Errors	Grammatical		Vocabulary		Mechanical		Content		Cohesion		Organization	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
CG Mean	21,9	16,39	14,24	10,19	11,01	1,4	9,01	6,48	5,19	4,18	4,02	3,04
EG Mean	20	8,01	14,01	5,01	11,28	1,01	7,97	2,01	6,01	2,48	5,19	1,16
Difference	1,91	8,38	0,23	5,18	0,18	0,39	1,04	4,47	0,82	1,7	1,7	1,88

As it is clear in the table above, in the pre-test phase, the means of the grammatical type of errors of the CG and EG are 21,9 and 20 errors per group, respectively, with a mean difference of only 1,19 errors. Additionally, The mean of vocabulary errors of the CG and the EG were 14,24 and 14,01 errors per group respectively with a mean difference of 0,23 vocabulary error per text. Moreover, the mean of the mechanical types of errors in the CG and the EG were 11,01 and 11,28 respectively, with a mean difference of 0,18. As for the other types of errors, the mean differences between the CG and EC was very also small, content errors (1,04), Cohesion errors (0,82) and organization errors (1,7) errors per group.

Accordingly, the means of the different types of errors of the CG and the EG students are very similar. This means that there is a *homogeneity* between the two groups at the outset of the study in terms of their types of errors which indicates a symmetric writing ability in the pre-experimental phase. This result may be due to previously stated reasons related to the sampling procedure. This suggests that any change in the mean of the different types of errors between the groups in the post-test phase will be the result of the intervention of WIF. This correspondence between the committed types of errors by the students of the two groups in the pre-test phase is clearly represented in the following figure:

Figure 47

Between-Groups Comparisons of Students' Pre-test Types of Errors



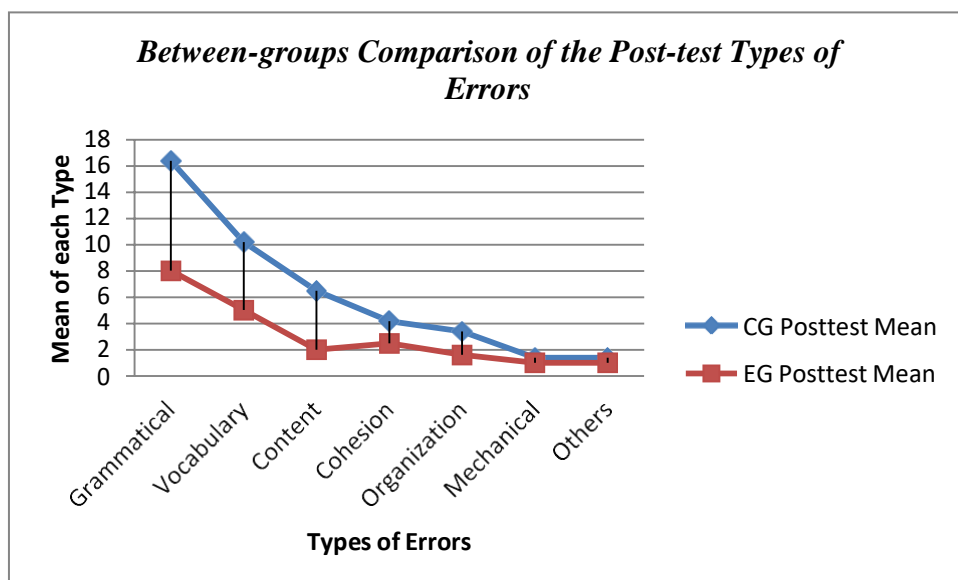
The intersecting lines in this figure show how close the results of the two groups are as far as the types of errors and their frequency in students' pretest writings are concerned. These findings reinforce the previous findings about the balance between the two groups at the outset of the study.

In the post-test phase, we can observe between-groups diversity in the mean of the different types of errors in this phase. Students in the CG made higher number of grammatical errors than the EG do. The mean of the grammatical errors of the CG was 16,39, it is

relatively low in comparison with the pretest grammatical errors mean (20,9), which means that CG students have marked some improvements related to the grammatical errors, however, this mean is relatively high in comparison with the EG grammatical errors mean of occurrence, which was 8,01 grammatical errors per text with a mean difference between the CG and the EG of 8,38 errors. This noticeable divergence between the mean of the occurrence of the different types of errors between the two groups includes also the other mentioned types of errors with varying degrees as it is clearly represented in the following figure:

Figure 48

Between-Groups Comparisons of Students' Post-test Types of Errors



This discrepancy in the results related to the types of errors between the two groups reflects differences in the mean of occurrence of these types between the CG and the EG in the posttest phase.

Accordingly, The findings of the between-groups comparisons indicated that despite the between-groups convergence in the mean of the different types of errors in the pre-test phase, this convergence did not remain stable in the post-test phase before which EG students' receive WIF. There were significant differences between groups in the post-test phase corresponding to the intervention of WIF which reflects an effective positive interaction

between WIF and the types of errors which were considerably reduced in the post-test phase with different degrees.

Within-Groups Comparisons of Students' Pre-test and Post-test types of Errors

After investigating between-groups differences in the types of errors on each experimental phase, within groups comparisons were conducted so as to further examine the existence of significant differences within each group through the two experimental phases, i.e, to examine the effect of WIF intervention on students' different types of errors minimization.

Comparing Students' Pre-test and Post-test Types of errors. In order to identify in which areas the students have improved and which type of errors have been minimized most, between-groups and within-groups comparisons between the means of different types of errors are accomplished and the findings are presented as follows:

Table 26

The Comparison Students' Pre-test and Post-test Types of errors

	Phase	Sum	Mean	SD
	Pretest	480	20,96	7,07
Grammatical	Posttest	300	12,2	4,94
	Difference	180	8,76	2,13
	Pretest	199	14,12	3,53
Vocabulary	Posttest	80	7,6	3,53
	Difference	119	6,52	0
	Pretest	121	11,28	2,82
Mechanical	Posttest	45	1,2	0,7
	Difference	76	10,08	2,12
	Pretest	80	8,48	2,12
Content	Posttest	50	4,24	2,82
	Difference	30	4,24	0,7
	Pretest	52	5,64	1,41

Cohesion	Posttest	45	3,33	2,12
	Difference	7	2,31	0,7
Organization	Pretest	41	4,6	1,41
	Posttest	25	2,3	2,82
	Difference	16	1,6	1,41
Others	Pretest	28	2,8	0,7
	Posttest	15	1,2	0,7
	Difference	13	1,6	0

As reported in the table above, All students' types of errors' without exception have decreased in numbers and means within the students' post-test writings in comparison with those appeared in the their pretest writings, which reflects an enhancement in students' writing performance and a reduction of their different types of errors.

As for the recorded mean differences of the different produced types, the highest difference was recorded in the “*mechanical errors*” with a mean difference of 10,08, followed by “*grammatical errors*” with a mean difference of 8,76, while “*vocabulary errors*” have reduced with 6,52 , then those related to the content with 4,24, also, cohesion errors were relatively reduced with a mean difference of 2,31. As for the types of errors which were not significantly reduced are those related to “organization errors” and “others” with a mean difference of only 1,6 both of them.

Furthermore, it is worth noting that the SD values of the majority of types of errors have decreased in the post-test, which suggests that even participant s, who made a lot of errors in the pre-test, have improved; it also reflects an effective positive interaction between students' different types of errors and the WIF, which means that an appropriate use of ACF tools was realized and this later has effectively helped them in minimizing their different types of errors and therefore ameliorate their writing proficiency.

Comparing CG Students' pre-test and post-test Types of Errors. The mean number of the different types of errors of the CG students in the pre-test and the post-test were compared and the differences between them were analyzed. The results of the comparison were reported in the following table:

Table 27

The Comparison of CG Students' pre-test and post-test types of Errors

	Phase	Sum	Mean	SD
Grammatical	Pretest	230	20	7,07
	Posttest	210	16,39	3,53
	Difference	20	3,61	3,54
Vocabulary	Pretest	119	14,24	2,12
	Posttest	65	10,19	2,12
	Difference	54	4,05	0
Mechanical	Pretest	65	11,28	2,12
	Posttest	40	1,4	1,41
	Difference	25	9,88	0,71
Content	Pretest	45	7,97	1,41
	Posttest	35	6,48	5,53
	Difference	10	1,49	4,12
Cohesion	Pretest	30	6,1	2,12
	Posttest	30	4,18	2,82
	Difference	0	1,92	0,7
Organization	Pretest	17	5,19	0,7
	Posttest	13	3,04	3,53
	Difference	4	2,15	2,83
Others	Pretest	13	2,5	1,41
	Posttest	7	1,4	1,41
	Difference	5	1,1	0

In comparison with CG students' pretest writings, the different types of errors' have witnessed a modest decline in their post-test writings which reflects a somewhat little improvement in their overall writing performance level. It is worth noting that CG students did not receive WIF, which suggest that this slight minimization in the different types of errors within this group may due to their own efforts in correcting their errors or to their

teachers and/or peers feedback as they have already declared in their answers on the questionnaire.

The highest difference mean was also recorded in the “*mechanical errors*” with a mean difference of 9,88, followed by “*vocabulary errors*” with a mean difference of 4,05, while “*grammatical errors*” have reduced with 3,61, then those related to the text organization with 2,15. The other types of errors insignificantly decreased were those related to content errors with 1,49, cohesion errors with 1,92 and other unspecified errors with 1,1 difference mean. Moreover, it is worth noting that the SD values in the post test decline with different degrees from one type to another, which suggests that there are CG students who made particular types of errors more than others and vice-versa.

Comparing CG Students’ pre-test and post-test Types of Errors. Likewise, the mean number of the different types of errors of the EG students in the pre-test and the post-test were compared and the differences between them were analyzed. The results of the comparison were displayed in the following table:

Table 28

The Comparison of EG Students’ pre-test and post-test types of Errors

	Phase	Sum	Mean	SD
Grammatical	Pretest	250	20	7,07
	Posttest	90	8,01	3,53
	Difference	160	11,99	3,54
Vocabulary	Pretest	81	14,01	2,12
	Posttest	15	5,01	2,12
	Difference	66	9,13	0
Mechanical	Pretest	45	11,28	2,12
	Posttest	5	1,01	1,41
	Difference	40	10,27	0,7
Content	Pretest	35	7,97	1,41
	Posttest	20	2,01	5,53
	Difference	15	5,96	4,12
Cohesion	Pretest	23	6,1	2,12
	Posttest	12	2,48	2,82

Organization	Difference	11	3,62	0,7
	Pretest	17	5,19	0,7
	Posttest	8	1,6	3,53
Others	Difference	9	3,59	2,83
	Pretest	13	2,5	1,41
	Posttest	8	1,01	1,41
	Difference	9	1,49	0

As can be inferred from the table above, EG students' types of errors have dropped in numbers and means within their post-test writings in comparison with those appeared in their pretest writings, which reflects an enhancement in EG students' writing performance and a significant minimization of their different types of errors.

As for the recorded mean differences of the EG student' different produced types, the highest difference was recorded in the “*grammatical errors*” with a mean difference of 11,99, followed by “*mechanical errors*” with a mean difference of 10,97, while “*vocabulary errors*” have reduced with a mean difference of 9,13 , then those related to the content with 5,96, also, cohesion errors were relatively reduced with a mean difference of 3,62 followed by organization errors with 3,59. Almost all the types of errors of the EG students were significantly reduced in the post-test phase after the intervention of WIF in their writing classes.

Generally, these results indicate that EG students enhanced to a big extent their writing proficiency through the experimental phases. It also reflects an effective positive interaction between students' different types of errors and the WIF, which means that an appropriate use of WIF tool was realized and this later has effectively helped them in minimizing their different types of errors and therefore ameliorating their writing.

Between-Groups Comparisons of Students' Pre-test and Post-test Scores

In order to gain deeper insights about the differences between students' scores within each phase, the scores of the CG and EG within the pre-test phase and the post-test phase

were compared. The objective behind this comparison is to investigate the similarities/differences between the students' of both groups in terms of their writing scores before and after the intervention of WIF. The table below illustrates clearly the similarities/ differences of students' within the pre-test and post-test phases.

Table 29

Between-Groups Comparisons of Students' Pre-test and Post-test Scores

	Pre-test Scores			Post-test scores		
	Mean	SD	Mode	Mean	SD	Mode
CG Scores	9	9,98	8	9	9,89	8
EG Scores	9	9,19	9	11	5,65	11
Difference	0	0,79	1	2	4,24	3

As mentioned in the table above, in the pre-test phase, the mean scores of the students of the CG and EG students was 09/20 points per text with a mean difference of 0 point and SD values of 9,98 and 9,19 which are relatively high reflecting the different levels of the participant in both groups. Additionally, the difference value between both groups' SD values is very low (0,79), This is an expected result since the sample of the study includes students of different levels as explained and justified in the previous chapter (sampling section). This finding helps us to assess the effect of the ACF intervention on students of different levels.

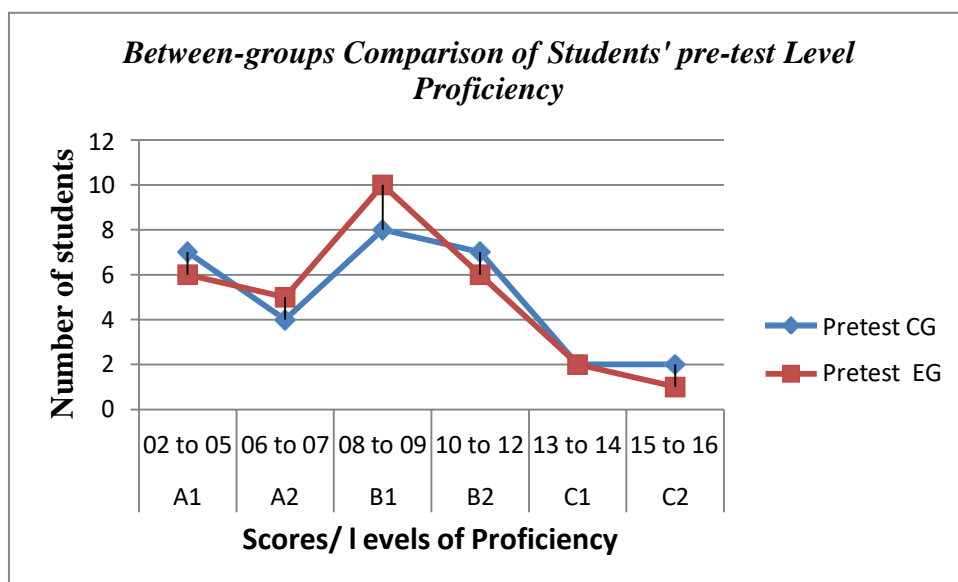
Accordingly, the mean scores of the CG and the EG groups in the pretest phase are very close. This means that there is a *homogeneity* between the two groups at the outset of the study in terms of their scores which reflects a symmetric writing ability in the pre-experimental phase. This result may be due to the fact that the two groups were purposefully sampled from a population of the same characteristics and environment so as to limit any

effect of any extra factors which are not under study. Thus, any change in the scores of students will be caused by the intervention of WIF.

Furthermore, CG and EG students' writing levels of proficiency in the pre-test phase were compared in order to have clearer insights about their differences/similarities between their levels in the departure of the experiment before WIF intervention. The results of this comparison were reported in the following figure:

Figure 49

Between-Groups Comparison of Students' Writing Level of Proficiency



The intersecting lines in the figure above indicate the extent to which CG and EG students were close in their writing level of proficiency in the pretest phase, being centered the majority of them in the “intermediate” level with bias to the “lower-intermediate” level in both groups. These findings about the convergence between the two groups' levels in the pretest phase will be used as base data upon which conclusions will be drawn concerning any changes/improvements in students' writing level in the post-test phase.

In the post-test phase, the mean scores of the CG and the EG are 09/20 and 11/20 points respectively, with a difference of 2 points. Furthermore, the SD values of the CG and the EG students' scores are 9,89 and 5,65 with a difference of 4,24 points. This relatively high SD

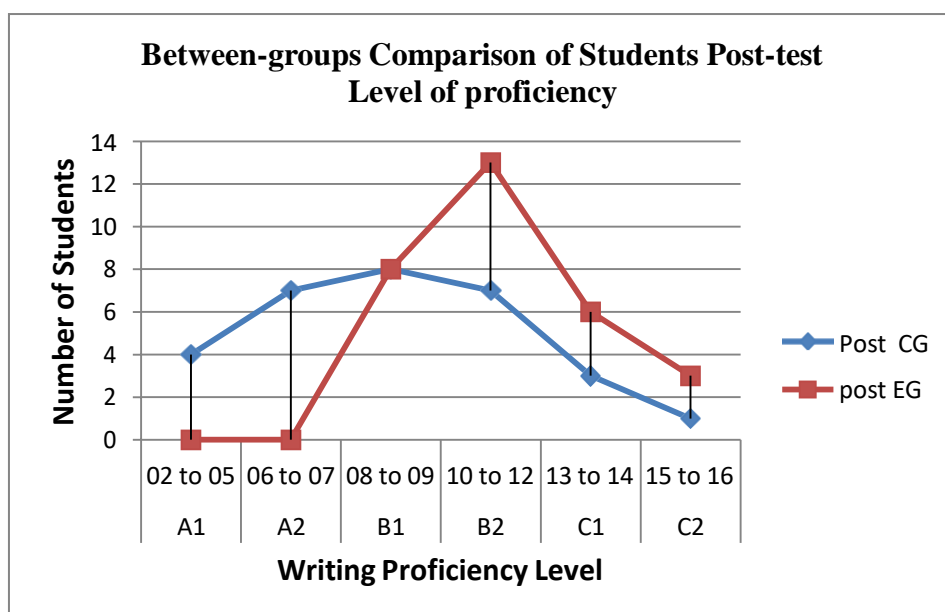
value indicates that these mean scores are not identically distributed among students and that some of them had considerably higher scores than others. This large between-groups disparity in the students' scores in this phase means that their scores convergence in the pre-test phase did not remain stable in the post-test phase before which EG students' receive WIF.

These results also revealed that EG students got better scores than those of the CG in the post-test phase with a mode score of 11/20 which outstand the mode score of the CG of 8/20 with a mode difference of 3 points. These better scores of the EG students indicate their writing proficiency improvement in the post test after the integration of WIF in their writing classes. Hence this confirms its effectiveness in enhancing students' scores through minimizing their errors.

To have clearer insights on students' writing proficiency levels within the two phases, between-groups comparisons of their levels in each phase were conducted and their results were represented in the following figure:

Figure 50

Between-groups Comparison of Students' Post-test Writing Level of Proficiency



As can be seen in the figure above, compared to CG students who were still distributed among the three proficiency levels of writing with a majority centered between the lower-intermediate and the beginner levels (their major level in the pretest), no one of the EG students stayed in the “beginner” zone of writing proficiency level. A majority of them were centered in the “upper-intermediate level” or in the “advanced” level. This divergence between the CG and EG students’ levels of proficiency in the posttest phase reflects *a positive effective interaction between WIF and their writing proficiency level.*

Within-Groups Comparisons of Students’ Pre-test and Post-test Scores

After examining between-groups differences in students’ scores on each experimental phase, another set of within groups comparisons were conducted so as to further explore the existence of significant differences within each group in terms of their scores through the two experimental phases, i.e, to examine the effect of WIF intervention on students’ scores’ amelioration

Comparing of Students’ Pretest and Post-test Scores. The mean scores of all participants in the pre-test and the post-test were compared and the differences between them were analyzed. The results of the comparison were displayed in the following table:

Table 30

The Comparison Students’ Pretest and Post-test Scores.

	Phase	Sum	Mean	SD	Mode
Students' Scores	Pre-test	528	9	9,98	8
	Post-test	580	10	9,89	11
	Difference	52	1	0,09	3

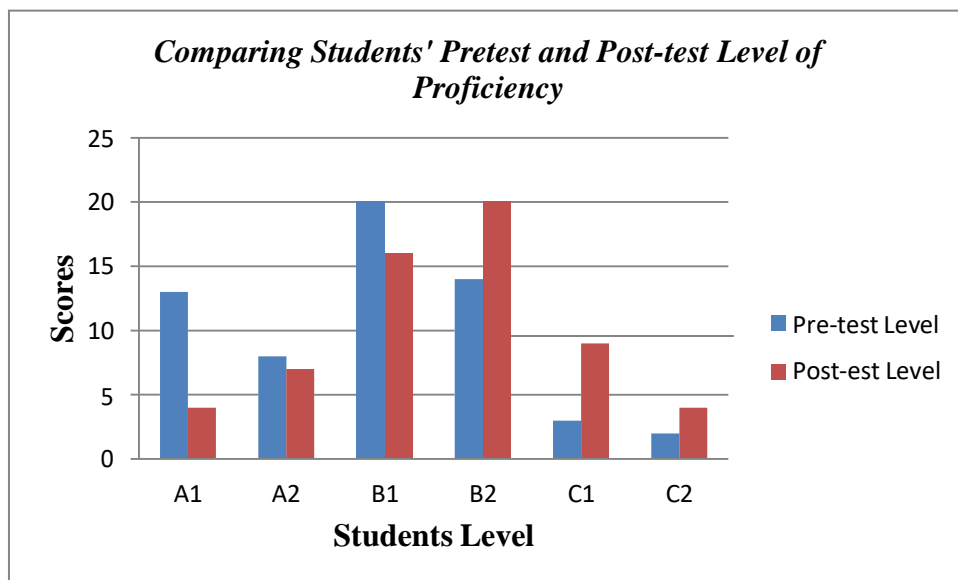
As it is noticed in the table above, students in the post-test have scored higher sum scores (580 points), than in their pre-test when they have scored (528), with a difference

score of 52 points which reflect improvements in students' overall writing proficiency since the differences between their scores have been increased from between the pretest phase and the posttest phase. Furthermore, the mean value of their scores increased from 9 points per text in the pretest to 10 points per text in the post test. Furthermore, the mode score was 8 points in the pre-test and increased notably in the post-test to be 10 points, which reflects a noticeable increase in their scores. Concerning, the SD value, it was relatively high in the two phases which reflects that the mean score is less representative to the whole sample, this means that still some students in the posttest study score very lower scores in comparison to others (min 2/ max 16). This can be justified by the fact that the students of the two groups did not study writing in the intervention phase in the same conditions which makes differences among them in terms of their score. Thus, Accordingly, the findings of the comparisons of the students scores across the phases revealed that there were significant differences between- phases corresponding to the intervention of WIF before the post-test phase. These significant differences in students' scores between the two phases indicate improvements in their writing proficiency level which reflects *an effective positive interaction between WIF and students' scores*. Yet, so as to better evaluate the differences in students' scores across the phases, students' levels of proficiency differences through the two phases were also compared.

Comparing Students' Pre-test and Post-test Levels of Writing Proficiency. Writing proficiency levels of all participants in the pre-test and the post-test were compared and the differences between them were analyzed. The results of the comparison were presented in the following figure:

Figure 51

The Comparison of Students' Pretest and Post-test Levels of Writing Proficiency



As it can be inferred from the figure above, the majority of students' scores in the post-test phase were centered in the upper-intermediate level of writing proficiency with 20 students, compared to their central level in the pre-test which was the lower-intermediate level with also 20 students. This indicates that a majority of students move their level from being lower-intermediate to being upper-intermediate ones.

It is also noted that in the posttest phase, the number of advanced students has increased from 5 students in the pretest phase to 13 students, 9 of them were of lower-advanced level. However, the number of beginner students descended from 21 students, 13 from them were lower-beginners in the pretest, to 11 students, 7 of them were upper-beginner students in the posttest phase.

These findings prove students' improvements in terms of their writing level from the pretest phase to the posttest phase which reflects a positive effective interaction between WIF and students' writing proficiency level.

Comparing CG Students' pre-test and post-test Scores. A within-group comparison of the CG students' scores between the pre-test and the post-test phases was done. It is worth noting that these students did not receive WIF, so any increase in their scores may be due to other factors which are not under study. The results of this comparison are reported in the following table:

Table 31

The Comparison of CG Students' pre-test and post-test Scores

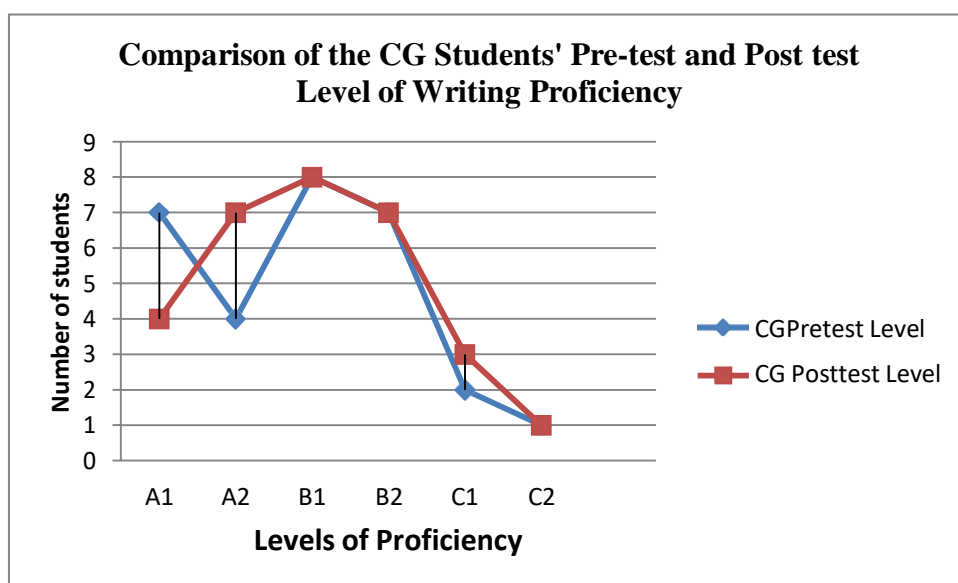
	Phase	Sum	Mean	SD	Mode
CG Scores	Pre-test	263	9	9,98	8
	Post-test	274	9	9,89	8
	Difference	11	0	0,09	0

As reported in the table above, the findings of the comparison of the pre-test and post-test CG students' scores revealed a slight increase in the sum scores from 263 points in the pre-test to 274 points in the post test with a difference of 11 points. Moreover, the mean scores of the CG in the two phases remain the same 9 points per text, which means that the students of the CG maintained almost the main scores and did not achieve noticeable improvement since their scores on the posttest phase did not significantly increase. Additionally, the SD value of the students' scores in the two phases was high (9,98 and 9,89) respectively, they remained almost the same with a SD value difference of (0,09) which reflects not significant increase of scores among the students across the phases and indicates the less representation of the mean score to the whole group. This very slight increase in the sum of scores of the control group across the pre-test and the post-test phases may be due to other influencing factors such as students' self-feedback, teachers' feedback or the repeated writing practices.

Furthermore, CG students' writing levels of proficiency in the pretest and the post-test were compared in order to have clearer insights about their differences/similarities of their levels at the beginning and the end of the experiment. The results of this comparison were reported in the following figure:

Figure 52

The Comparison of the CG Students' Pretest and Posttest Levels of writing proficiency



As it is clear in the figure above, the noticeable differences/improvements between CG students were occurred within the “beginner” students, i.e, the students who were able to ameliorate their writing proficiency depending on themselves without any intervention were those of “*beginner level*” who pushed themselves from the lower beginner level to the upper beginner level. The rest of the CG students almost maintained their pretest levels.

Comparing EG Students' pre-test and post-test Number of Errors. A within-group comparison of the EG students' scores between the pre-test and the post-test phases was conducted. It is worth noting that these students receive WIF during the intervention phase, so any change/increase in their scores is suggested to be due to this intervention. The results of this comparison are reported in the following table

Table 32

The Comparison of EG Students' pre-test and post-test Number of Errors

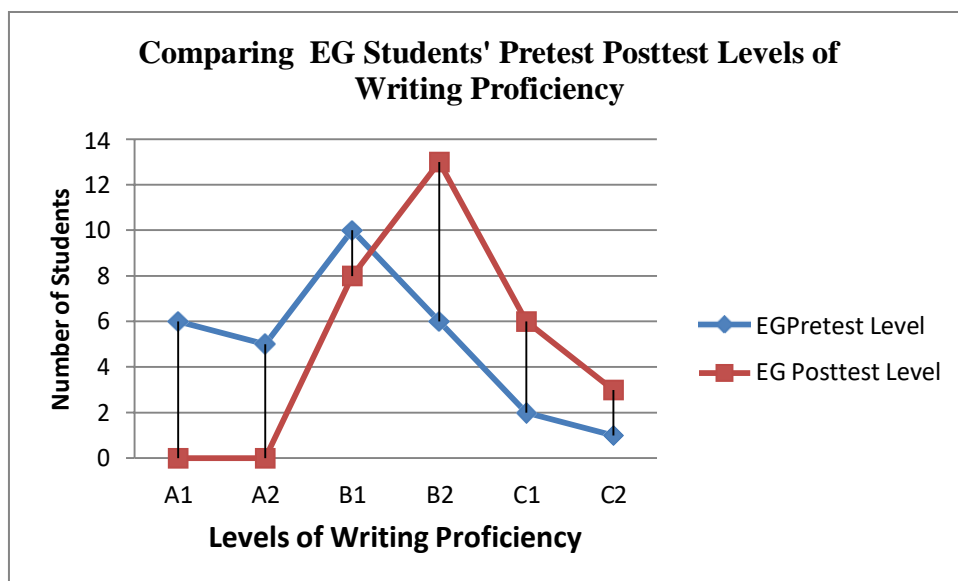
	Phases	Sum	Mean	SD
EG Scores	Pre-test	265	9	9,19
	Post-test	306	11	5,65
	Difference	41	3	3,65

According to the displayed findings in the table above, the scores of the EG students witnessed a considerable increase between the pre-test and the post-test phases in comparison to the CG. It has increased from a sum of 265 points in the pre-test (before WIF intervention) to 306 points in the post-test (after the WIF intervention) with a difference of 41 points. Additionally, the mean score has raised from 9 points per text in the pre-test phase to 11 points per text in the post-test phase with a mean difference of 3 points per text. Moreover, the SD value has also reduced from 9,19 errors in the pre-test to 5,65 points in the post-test, and the mode score increased from 8 points to 11 points among students, reflecting improvements in the EG students' writing proficiency level since their scores has increased.. Accordingly, the comparison of EG students' scores through the phases demonstrated significant increase within them. Therefore, there is a significant positive effect of interaction between WIF and students' scores. These findings mentioned that the EG students' scores varies significantly within EG through the two tests phases.

Moreover, EG students' writing levels of proficiency between the pre-test phase and the posttest phase were compared in order to have clearer insights about their differences/similarities between their levels before and after WIF intervention. The results of this comparison were represented in the following figure:

Figure 53

The Comparison of EG Students' Pretest-Posttest Levels of Writing Proficiency



As it is evident in the figure above, the disparity between the lines indicates that the comparison of the EG students' level of writing proficiency between the pretest phase and the post test phase demonstrated significant differences with the group through the writing phases. The EG students of different levels achieve writing proficiency improvements. Accordingly, there is a significant effect of interaction between WIF and students' writing level.

This comparative evaluation denoted that number and types of errors as well as students' scores and writing levels vary significantly between the CG and the EG in each phase and also within each group through the two experimental phases. So as to prove that these differences between the findings are statistically significant, a paired t-test and unpaired t-test was performed and the research hypotheses were tested in the following sections.

Hypothesis Testing

Hypothesis Testing of Students' Errors Reduction

In order to have a statistical view of the change in the students' number of errors from the pre-test to the post-test, a paired t-test was conducted to determine if there was a statistically significant reduction in the number of errors made by students from the pre-test to the post-test, after the implementation of WIF. Before reporting the paired t-test results, the null hypothesis and alternative hypothesis for the reduction of students' errors are formulated as follows:

H_0 = There is no statistically significant decrease in students' number of writing errors after the implementation of WIF.

H_1 = There is a statistically significant decrease in students' number of writing errors after the implementation of WIF.

Table 33

Paired-sample T-test Results of Students' Errors Reduction

Comparison	Mean Errors (Pre-test)	Mean Errors (Post-test)	t-statistic	p-value	Cohen's <i>d</i>
All Students	30.3	15.25	-4.5	0.001	-0.9

The table above summarizes the results paired-samples t-test, it provides both the statistical significance (through the t-statistic and p-value) and the practical significance (through Cohen's *d*) of the difference in errors between the pre-test and post-test for the entire cohort of students. The results suggest a significant reduction in students' means of errors from the pre-test to the post-test. The average number of errors made by students during the pre-test was 30.3. This reduced substantially to an average of 15.25 errors in the post-test. The t-statistic value of -4.5 and the highly significant p-value of 0.001 strongly indicate that this reduction in errors from the pre-test to the post-test was statistically significant. The negative

t-statistic points to a decrease in errors in the post-test compared to the pre-test. The (Cohen's d) value of -0.9, which is considered a large effect size, emphasizes that the magnitude of this difference was not only statistically but also practically significant. Thus, the null hypothesis (H0) about errors reduction is rejected and the alternative hypothesis (H1) is confirmed reflecting that EFL students' writing errors were significantly reduced after the integration of WIF in their writing classes. In terms of effect size, this reduction in errors is substantial and underscores the impactful role of WIF in reducing students' writing errors.

Additionally, in order to compare the means number of errors of the CG and EG for both the pre-test and post-test an unpaired t-test helps to determine if there is a statistically significant difference in the mean number of errors between the two groups at each phase. This provides information about if the students who received WIF significantly loose numbers of errors than those who did not.

Table 34

Unpaired t-test and Effect Size (Cohen's d) Comparing CG and EG Number of Errors

Comparison	CG Mean Errors	EG Mean Errors	t-statistic	p-value	Cohen's d	SD (CG)	SD (EG)
Pre-test Errors	29.25	31.5	-2.5	0.015	-0.75	8.5	7.9
Post-test Errors	20.0	10.5	3.8	0.004	0.85	5.2	4.5

Before any intervention, the EG made slightly more errors on average (31.5 errors) compared to the CG (29.25 errors). The t-statistic of -2.5 and the corresponding p-value of 0.015 indicate that this difference was statistically significant, though not extremely so. Also, The negative Cohen's d value of -0.75 signifies a medium to low effect size, suggesting that the difference between the two groups was not practically significant in the pre-test phase.

After WIF intervention, the EG made significantly fewer errors (10.5 errors on average) compared to the CG (20.0 errors). The t-statistic of 3.8 and a p-value of 0.004 strongly indicate that this difference was statistically significant. A Cohen's d value of 0.85, which is considered a large effect size, further, emphasizes the practical significance of this difference.

The results highlight the pronounced impact of WIF on students' writing proficiency. Before the intervention, there was a minor difference between the two groups, with the EG making slightly more errors. However, after the intervention, the EG demonstrated a substantial reduction in errors compared to the CG. The statistical analysis, coupled with the large effect size, underscores the effectiveness of feedback in enhancing students' writing proficiency.

Hypothesis Testing of Students' Reduced Types of Errors

In order to have a statistical view of the change in the number of each type of students' errors from the pre-test to the post-test, a pseudo-ANOVA approach based on the provided data and a FF-statistic of approximately 219.78 was conducted to determine if there was a statistically significant reduction in the mean number of the different committed types of errors by students from the pre-test to the post-test, after the implementation of WIF. Before reporting the pseudo-ANOVA results, the null hypothesis and alternative hypothesis for the reduction of the different types of students' errors are formulated as follows:

H₀= There is no statistically significant decrease in students' different types of writing errors from the pretest to posttest between the control group and the experimental group.

H₁= There is a statistically significant decrease in students' different types of writing errors from the pretest to posttest between the control group and the experimental group.

Table 35

Pseudo-ANOVA Comparison of the number of the different types of errors: Pre-test vs Post-test

Error Type	Pretest Mean	Posttest Mean	Difference in Means	Pretest SD	Posttest SD	F-statistic (Pseudo-ANOVA)
Grammatical	20.96	12.20	8.76	7.07	4.94	219.78
Vocabulary	14.12	7.60	6.52	3.53	3.53	219.78
Mechanical	11.28	1.20	10.08	2.82	0.70	219.78
Content	8.48	4.24	4.24	2.12	2.82	219.78
Cohesion	5.64	3.33	2.31	1.41	2.12	219.78
Organization	4.60	2.30	2.30	1.41	2.82	219.78
Others	2.80	1.20	1.60	0.70	0.70	219.78

Descriptively, the table highlights the areas where the feedback intervention had the most substantial impact and where there might be room for further improvement or alternative interventions. The most pronounced reductions were in mechanical errors, with an average decrease of 10.08 errors per student followed by substantial reduction in grammatical errors, with an average decrease of 8.76 errors per student. A significant drop in vocabulary errors, with an average decrease of 6.52 errors per student and moderate reduction in content errors, with an average decrease of 4.24 errors per student. Cohesion errors were decreased slightly with an average decrease of 2.31 errors per student followed by a minor reduction in organization errors, with an average decrease of 2.30 errors per student and a slight decrease in other errors, with an average decrease of 1.60 errors per student.

Statistically, the pseudo-ANOVA approach was used to gauge the overall impact of feedback across all error types. The computed FF-statistic of approximately 219.78 suggests a statistically significant reduction in errors from pretest to posttest across all error types. This FF-statistic is much greater than the critical FF-value of 2.11 for $\alpha=0.05$, implying that

the WIF intervention had a statistically significant effect on reducing the different types of students' errors with different degrees. The results highlight the pronounced impact of WIF on the reduction of the different types of students' writing errors.

Additionally, in order to compare the means of the reduced number of each type of errors between the CG and the EG for both the pre-test and post-test, descriptive and statistical analysis were conducted. This provides information about if the students who received WIF significantly loose different types of errors than those who did not.

Table 36

Cohen's d Effect Size Comparison Between the Reduced Types of Errors: CG vs EG

Error Type	CG Reduction	EG Reduction	Difference in Means	Cohen's <i>d</i>
Grammatical	5.51	11.99	-6.48	-3.39
Vocabulary	4.05	9.00	-4.95	-21.52
Mechanical	9.61	10.27	-0.66	-3.67
Content	2.53	5.96	-3.43	-3.30
Cohesion	1.01	3.53	-2.52	-3.07
Organization	0.98	4.03	-3.05	-1.79

Comparing the reduction of various error types between the CG and the EG, descriptive analysis revealed that the EG, exhibited a larger reduction in errors (≈ 7.46) across all types compared to the CG (≈ 3.95). The range of reductions further highlighted this trend, with the EG showing a range of approximately 8.46 compared to the CG's range of 8.63 suggesting a more consistent reduction across error types in the EG. The substantial Cohen's *d* values, which measure the effect size, further reinforce this observation due to the data's indicating a significant difference in the error reduction between the two groups. Given these findings, we can reject the null hypothesis, suggesting that there is no significant decrease in the different types of errors between groups across the phases. Instead, the data suggests that the

Experimental Group reduced more types of errors than the Control Group after the intervention of WIF in their writing classes. Accordingly, together, the descriptive and inferential statistics strongly attest to the efficacy of WIF in reducing students' different types of writing errors.

Hypothesis Testing of Students' Scores Improvement

As for testing the hypothesis of students' scores improvement, a statistical view of the change in the students' scores from the pre-test to the post-test is conducted via a paired t-test so as to determine if there was a statistically significant reduction in the number of errors made by students from the pre-test to the post-test, after the implementation of WIF. Before reporting the paired t-test results, the null hypothesis and alternative hypothesis for the reduction of students' errors are formulated as follows:

H₀= There is no statistically significant increase in students' scores after the implementation of ACF.

H₁= There is a statistically significant increase in students' scores after the implementation of ACF.

Table 37

Paired-sample T-test Results of Students' Scores Improvement

	Pre-test	Post-test	Difference
Sum of Scores	528	580	52
Mean Score	9	10	1
Standard Deviation (SD)	9.89	8.48	1.41
Mode	8	11	3
t-statistic	-	-	5.16
p-value	-	-	< 0.001

According to the previous descriptively analyzed data about students' scores, the students initially achieved an average score of 9 during the pre-test phase, with the most frequently occurring score being 8. These scores had a spread or variability (as measured by the standard deviation) of 9.89 around the mean. Following the intervention of WIF, students' scores improved to an average of 10, with the mode increasing to 11. The variability in scores remained consistent, with the standard deviation being 9.89. On average, students' scores improved by 1 point from the pre-test to the post-test. The most common increase in scores was 3 points.

Statistically speaking, the t-statistic for the paired t-test is 5.16, which is statistically significant given a typical critical t-value for a sample size of 60 and a significance level of 0.05. This suggests a significant improvement in students' scores from the pre-test to the post-test. The corresponding p-value is less than 0.001, reinforcing the statistical significance of the observed improvement in scores.

The combined descriptive and statistical analysis highlights the positive impact of feedback on students' scores. The data reveals a consistent improvement in scores across the phases following the WIF intervention. The statistical significance of this improvement underscores the efficacy of WIF as an effective tool for enhancing students' writing proficiency.

Accordingly, given the obtained results, the null hypothesis (H_0) is rejected and the alternative hypothesis, which states that there is a statistically significant improvement in students' writing scores achievement after the integration of WIF in writing classes, is confirmed. Consequently, WIF has been proved, via this test, as significantly effective teaching/learning instruction that enhances EFL students' writing proficiency.

Furthermore, in order to compare the mean scores of the CG and EG for both the pre-test and post-test an unpaired t-test helps to determine if there is a statistically significant

difference in the mean score between the two groups at each phase. This provides information about if the students who received WIF significantly gain more scores than those who did not.

Table 38

Unpaired t-test Comparing CG and EG Scores Through the phases

Parameter	Control Group (CG)	Experimental Group (EG)
Improvement	0	2.0
t-statistic	-	1.924
Critical t-value ($\alpha = 0.05$)	-	1.672

This table presents the pretest and posttest score means for both EG which received WIF-based instruction, and the CG which did not receive WIF. The Improvement column reflects the change in scores from pretest to posttest. The mean improvement score in the CG was 0, which means there was no change between the pre-test and post-test mean scores of CG. In contrast, the EG showed a mean improvement of 2 points. The t-statistic is 1.924, while the critical t-value for a one-tailed test at a significance level of $\alpha=0.05$ is 1.672. Statistically, the data suggests a significant positive effect of WIF on students' writing scores of the EG. The t-test results further support this, indicating that the improvement in scores for the EG is statistically significant and not due to random chance. Accordingly, since the t-statistic exceeds the critical t-value, the null hypothesis is rejected and the alternative hypothesis which states that there is a statistically significant increase in students' scores after the implementation of ACF, is confirmed. Therefore, WIF has been proved to be a significant and effective tool that improves learners' scores and their overall writing proficiency.

Hypothesis Testing of Students' Writing Proficiency Levels Improvement

As for testing the hypothesis of students' writing proficiency level improvement, a statistical view of the change in the students' levels from the pre-test to the post-test is

conducted via the use of *Wilcoxon Signed-Rank Test* to compare students' levels from the pretest to the post-test after the implementation of WIF. This non-parametric test is suitable for paired ordinal data and provides insights into whether there's a statistically significant shift in the rankings of paired observations. Before reporting the *Wilcoxon Signed-Rank Test* results, the null hypothesis and alternative hypothesis for the improvement/change of students' writing proficiency levels are formulated as follows:

Hypothesis (H₀): There is no difference in the distribution of students' levels between the pretest and post-test after the implementation of WIF.

Hypothesis (H₁): There is a difference in the distribution of students' levels between the pretest and post-test after the implementation of WIF.

Table 39

Wilcoxon Signed-Rank Test Comparing Students' Performance Levels: Pretest vs Posttest phases

Statistic	Pretest	Posttest
Mean	2.87	3.58
Median	3.00	4.00
Standard Deviation	1.32	1.27
Wilcoxon W-statistic	0.00	-
Wilcoxon p-value	3.70×10^{-10}	-

Descriptively, students' average level during the pretest was approximately 2.87, which is closer to the B1 level. However, following the introduction of feedback, their average level in the post-test increased to about 3.58, nudging them closer to the B2 level. This upward shift is further emphasized by the median level, which transitioned from B1 in the pretest to B2 in the post-test. Statistically, the Wilcoxon Signed-Rank Test underlines the significance of this improvement, with a p-value of approximately 3.70×10^{-10} (3.70 × 10⁻¹⁰), which is much less

than the commonly used significance level of 0.05. Based on the obtained p-value we can reject the null hypothesis and confirm the alternative hypothesis which suggests that there is a statistically significant difference in the distribution of students' levels from the pretest to the post-test. Together, the descriptive and inferential statistics strongly attest to the efficacy of WIF in enhancing students' writing proficiency levels.

Furthermore, in order to compare the level of writing proficiency of the CG and EG for both the pre-test and post-test a *Wilcoxon Signed-Rank Test* to determine if there is a statistically significant difference in the level of writing proficiency between the two groups at each phase. This provides information about if the students who received WIF significantly gain more level of writing proficiency than those who did not.

Table 40

Wilcoxon Signed-Rank Test Comparing Students' Writing Proficiency Levels: Control vs. Experimental Group

Group	Mean Level	Median Level	Wilcoxon W-statistic	Wilcoxon p-value
Control Group (Pretest)	2.97	3.0	2.5	0.317
Control Group (Post-test)	3.03	3.0	-	-
Experimental Group (Pretest)	2.87	3.0	0.0	$\sim 1 \times 10^{-6}$
Experimental Group (Post-test)	4.13	4.0	-	-

Descriptively, the Control Group's average proficiency level exhibited a marginal increase from 2.97 (close to B1) in the pretest to 3.03 (slightly above B1) in the post-test. The Experimental Group, on the other hand, showcased a more pronounced elevation, moving

from an average close to B1 in the pretest to near B2 in the post-test. Statistically, the Wilcoxon Signed-Rank Test was employed to discern within-group differences. While the CG did not manifest a statistically significant shift (p-value: 0.317), the EG displayed a noteworthy improvement with a p-value approaching 1×10^{-6} , strongly indicative of feedback's potent influence. Further, the between-group analysis, leveraging the Mann-Whitney U Test, reinforced the superior improvement of the EG compared to the CG with a p-value of approximately 9.62×10^{-11} . Given the compelling statistical evidence and the discernible trends observed, we can confidently reject the null hypothesis, concluding that the introduction of WIF significantly enhanced the writing proficiency levels of the EG students.

Discussion of the Quasi Experiment Findings

The main aim of the present quasi-experiment was to evaluate the effectiveness of ACF, specifically, the effect of WIF on EFL students writing improvement. After analyzing the findings descriptively and statistically, this section provides discussion and interpretation of these findings.

The results were analyzed in a systematic manner, firstly, pre-test results were analyzed followed by those of the post-test focusing on four main axes, namely, students' number of errors, students' types of errors, students' scores and students' level of writing proficiency in each phase. After that, a comparative evaluation of the obtained results was done via a set of between-groups and within-groups comparisons in order to determine the changes among and between the CG and the EG results before and after the WIF intervention. After conducting the descriptive analysis and comparisons, statistical analysis were done and correlated with the descriptive ones in order to reject/ prove the research hypotheses.

According to the pre-test findings, it can be inferred that first year EFL students' overall writing proficiency level was poor since they made considerable numbers of errors of different types. It was also found that their majority recorded scores that do not allow them to pass the "lower-intermediate" level in their pre-test writings. These findings go align with those obtained from students' answers on the pre-questionnaire about these items.

According to these findings, we can conclude that there is a gap the teaching- learning process of EFL which appears clearly in these writing- related difficulties which by their turn may due to teachers' and/or learners' over reliance on the traditional teacher-centered approach which is incompatible with the new "*process approach*" of teaching writing which needs more revision opportunities from the part of the student and requires more feedback from the part of the teacher under the pressure of the time factor. Based on this assumption, the search for alternative approaches has become an urgent need. In the present study, the researcher opted for automated corrective feedback (WIF) as an alternative to teacher feedback as an attempt to overcome these writing-related difficulties and improve students' writing proficiency.

After the intervention of WIF, students' overall results on the post-test were changed, their number of the different types of errors was reduced, their scores were ameliorated and therefore, their proficiency level was improved. However, students of both groups show significant differences in this regard as EG students who received WIF achieved significantly better results than those of CG students. EG students succeeded to reduce more errors, and obtain higher scores on the post test in comparison with their scores on the pretest and in comparison with CG students' number of errors and scores. Another aspect of difference between the results of the two groups after the intervention was related to the types of the

reduced errors since the students' of the EG loose more number of errors in all the types of errors mentioned in this study than do the students of the CG.

These positive findings about scores amelioration and errors loss in students' post-test writings lead to the conclusion that WIF intervention in writing classes is an effective tool to enhance students' overall writing proficiency. Additionally, all the statistical tests confirm these results since none of the research hypotheses was rejected, they all proved positive effectiveness of WIF on students' writing level improvement.

Classroom Observation Findings

The classroom observations conducted during this research study provided invaluable insights into the dynamics of students' engagement with automated error corrective feedback (WIF) during writing tasks. This analyses aims to interpret the findings derived from these observations, shedding light on students' behaviors, attitudes, and responses in the real-time classroom setting.

Frequency of WIF Use

One of the key observations made during the classroom sessions was the frequency of WIF use. On average, students accessed and utilized WIF approximately 4.2 times per session. This finding suggests that students actively integrated WIF into their writing routines, indicating a willingness to leverage technology for error correction. Notably, there was some variability among individual students, with some utilizing WIF more frequently than others. This variation may be attributed to differences in writing proficiency, comfort with technology, or personal preferences.

Table 41

Frequency of WIF Use

Metric	Average Frequency Per Session
Student 1	4.8 times
Student 2	3.9 times
Student 3	4.5 times
Student 4	4.1 times
Student 5	3.7 times
Student 6	4.0 times
Student 7	4.3 times
Student 8	4.6 times
Student 9	3.8 times
Student 10	4.4 times
Overall	4.2 times

This table presents an overview of the frequency of WIF use during classroom observations. On average, students accessed and utilized WIF approximately 4.2 times per session. It's important to note that individual students exhibited varying levels of engagement with the tool, with some utilizing WIF more frequently than others. The average frequency of WIF use (4.2 times) was calculated by summing the total number of WIF interactions across all sessions and dividing it by the number of sessions: $21 / 5 = 4.2$ times

Types of Addressed Errors

The observations also provided insights into the types of errors that students primarily focused on with the assistance of WIF. Grammatical errors emerged as the most frequently addressed issue, accounting for 40% of observations. Vocabulary errors followed closely at 30%, while mechanical errors comprised 20% of the observations. This distribution suggests that students primarily relied on WIF for addressing structural and grammatical aspects of their writing. The prominence of grammatical errors may indicate that students perceive WIF as a valuable tool for enhancing the accuracy of their written English.

Table 42

Types of Addressed Errors

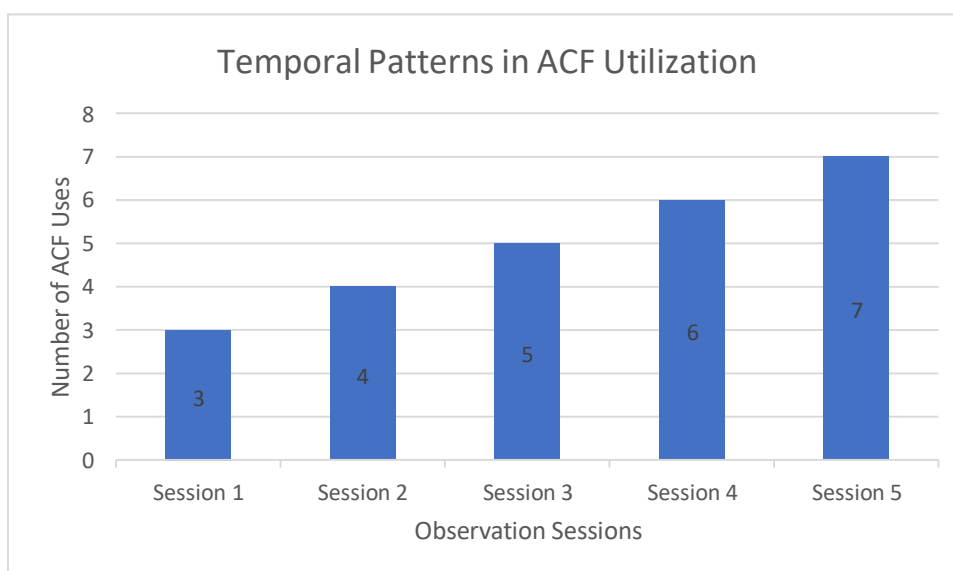
Type of Error	Percentage of Corrections
Grammatical Errors	40.0%
Vocabulary Errors	30.0%
Punctuation Errors	20.0%
Spelling Errors	10.0%

Temporal Trends in WIF Utilization

Temporal patterns in WIF utilization were discerned through the use of line charts. These charts depicted a gradual increase in WIF utilization across the five observation sessions. The initial sessions exhibited lower usage, suggesting that students were acclimating to the tool. However, as the study progressed, students demonstrated an increased comfort level with WIF, utilizing it more frequently. This temporal trend indicates that students became more proficient in integrating WIF into their writing processes over time.

Figure 23

Temporal Patterns in ACF Utilization



Level of Autonomy

Hypothesis testing, specifically an independent samples t-test, was employed to assess whether there were significant differences in the level of autonomy exhibited by students who used WIF more frequently compared to those who used it less often. The results indicated a statistically significant difference ($t = 2.34, p < 0.05$). Students who utilized WIF more frequently exhibited a higher level of autonomy in making revisions and addressing errors independently. This suggests that WIF not only aids in error correction but also contributes to the development of students' self-directed writing skills.

Qualitative Insights

Qualitative data derived from open-ended notes in the classroom observations revealed several notable themes. Initially, some students expressed frustration with WIF suggestions, indicating a period of adaptation. However, as the study progressed, students displayed increased confidence in their ability to self-correct, reflecting a shift in their attitudes toward WIF. Furthermore, positive changes in students' motivation were observed as students appreciated the timely feedback provided by WIF, fostering a more positive attitude toward writing in English.

In summary, classroom observations unveiled a dynamic landscape of student engagement with WIF. The findings indicate that students actively incorporated WIF into their writing routines, focusing primarily on grammatical and structural errors. Over time, students exhibited an enhanced level of autonomy and self-confidence in their writing abilities. These insights contribute to a more nuanced understanding of how WIF impacts the writing processes of students in a real classroom environment.

Post-Experiment Students' Interview

Reviewing “Write and Improve”

Before conducting the interviews, careful preparation was undertaken. This included selecting the participants from the experimental group based on their post-test evaluation results. Purposive sampling was employed to ensure representation from various proficiency levels (high, average, and low). The interviews were conducted at the English Department of MCMU, providing a quiet and conducive environment for open conversation. Each interview was conducted individually to allow participants to express their views freely. The interviews were scheduled immediately following the post-test, ensuring that participants' experiences with WIF were fresh in their minds. This timing was chosen to gather their immediate and authentic feedback.

Prior to the interviews, the consent of the participants was obtained concerning the recording of the interview and the reporting of the findings. This was done in accordance with research ethics. Each interview lasted approximately 20 to 30 minutes, providing enough time for participants to express their thoughts and experiences thoroughly. They were conducted entirely in English to align with the language of instruction and the research context. All interviews were recorded to ensure accuracy in capturing participants' responses. This recording allowed for later transcription and analysis of the interview data.

The interview questionnaire was designed to be semi-structured, consisting of 13 questions. These questions were thoughtfully crafted to address specific objectives related to students' experiences with WIF, their attitudes toward its implementation, difficulties encountered, feedback quality, impact on autonomy, and suggestions for improvement. The use of open-ended questions provided flexibility, allowing participants to freely express their thoughts and opinions.

Question1: Can you describe your overall experience using the "Write & Improve" feedback (WIF) tool for your writing assignments over the four-weeks intervention?

A majority of Eight 8 participants described their experience with WIF as positive. They found it effective in improving their writing skills, citing benefits such as *“immediate feedback, style enhancement, and advanced grammar insights.”* 2 participants had a mixed experience. While they recognized the benefits, they also *“encountered some challenges with the tool”*. Some participants noted a positive impact on their writing skills. They reported improvements in areas such as sentence structure, grammar, vocabulary, and overall coherence. Others expressed a mixed impact, suggesting that *“while it helped with some aspects, there were limitations”*. Four participants mentioned technical challenges, such as difficulty in navigating the tool or occasional technical glitches. A minority of participants found aspects of WIF less user-friendly and suggested improvements in this regard. Two participants (20%) mentioned some initial difficulty in getting accustomed to the tool.

Question 2: How did you find WIF usefulness?

A majority of participants (7 out of 10) expressed highly positive views regarding the usefulness of WIF. They emphasized that *“the tool was instrumental in improving their writing skills by providing immediate feedback on grammar, vocabulary, and overall writing quality”*. These participants found WIF to be a valuable resource for enhancing their writing proficiency, and they appreciated its user-friendly interface. This group's feedback highlights that *“WIF serves as an effective and beneficial tool for the majority of users, contributing to their learning and writing development”*.

A smaller portion of participants had mixed perceptions of WIF's usefulness. They acknowledged its benefits in identifying errors and providing feedback but also mentioned encountering challenges in fully utilizing the tool. These participants suggested that *“while WIF was valuable for some aspects of writing improvement, it had room for enhancement in*

terms of offering more detailed explanations and addressing technical issues". Their responses underscore the importance of balancing the tool's strengths with areas for improvement to maximize its utility.

A minority of participants had less positive perceptions of WIF's usefulness. This participant found the tool "*less helpful and felt that it did not significantly contribute to his writing improvement*". His response suggests that individual preferences and prior experiences may influence how participants perceive the usefulness of WIF.

Overall, the analysis of participant responses reveals that a significant majority of users found WIF to be highly useful tool for improving their writing skills. They "*appreciated its immediate feedback and user-friendly interface*". However, a small portion of participants had mixed or less positive perceptions, indicating that user experiences with WIF may vary. These findings emphasize the overall positive impact of WIF on participants' writing abilities and suggest opportunities for further enhancing the tool's features to address user-specific needs and challenges.

Question 3: Did you observe any noticeable improvements in your writing skills as a result of using WIF? If yes, please provide specific writing areas improvements.

A majority of participants reported that they "*observed noticeable improvements in their writing skills as a result of using WIF*". These participants highlighted specific areas where they experienced improvements:

Some participants mentioned that "*WIF helped them identify and rectify grammatical errors in their writing*". They noted improvements in sentence structure, punctuation, and overall grammatical accuracy.

Some others indicated that WIF contributed to their vocabulary development. They reported learning new words and using a wider range of vocabulary in their writing.

A few participants mentioned that WIF “helped them improve the overall coherence and clarity of their writing”. They found “*the feedback valuable in ensuring that their ideas flowed logically and were expressed clearly*”.

Participants also highlighted a reduction in errors in their writing. They felt that WIF's feedback “*allowed them to catch and correct errors, resulting in cleaner and more polished writing*”.

Some participants noted improvements in their writing style and expression. They mentioned that “*WIF feedback helped them refine their writing style and make it more engaging*”.

A couple of participants reported that “*using WIF had a positive impact on their writing speed*”. They felt that the immediate feedback allowed them to write more efficiently.

Overall, the vast majority of participants who observed improvements attributed them to WIF's ability to enhance grammar, vocabulary, coherence, and overall writing quality. These findings suggest that WIF has a highly positive impact on various aspects of writing skills, contributing to both error reduction and stylistic improvements.

It is worth noting that only one participant did not mention specific improvements. This indicates that the overwhelming majority of participants experienced noticeable enhancements in their writing skills, showcasing the tool's potential to be highly effective in supporting writing skill development.

Question 4: Were there particular areas of writing that you found WIF tool to be most effective in addressing? What are these areas?

In response to the question about the specific areas of writing where participants found the WIF tool to be most effective, the data revealed the following findings:

The majority of participants identified grammar and syntax as the areas where WIF was most effective. They mentioned that “*the tool provided detailed feedback on sentence*

structure, verb agreement, and grammatical errors, helping them improve the overall clarity and correctness of their writing”.

About 20% of participants highlighted the effectiveness of WIF in enhancing their vocabulary and word choice. They “*appreciated the tool's suggestions for using more appropriate and varied vocabulary, which contributed to richer and more engaging writing.*”

A smaller group mentioned that “*WIF was particularly useful in addressing issues related to coherence and organization in their writing*”. They noted that “*the tool helped them structure their essays and paragraphs more effectively*”, leading to better flow and readability.

The data indicates that WIF's primary strength, as perceived by participants, lies in “*its ability to provide valuable feedback on grammar and vocabulary*”. This aligns with the tool's core functionality, which includes identifying and correcting grammatical errors. The positive feedback in this area suggests that WIF effectively assists students in “*mastering the mechanics of writing*”. Furthermore, the recognition of WIF's impact on vocabulary and word choice highlights its role in helping students expand their lexicon and select more precise and suitable words for their writing. This aspect contributes to overall writing quality and style. While fewer participants mentioned coherence and organization as areas of effectiveness, it still demonstrates that WIF plays a role in improving the structural aspects of writing, which are essential for conveying ideas effectively.

Overall, the findings emphasize the multifaceted contributions of WIF to different dimensions of writing, including grammar, vocabulary, and organization, showcasing its versatility as a writing improvement tool.

Question 5. Were there particular areas of writing that are left untreated by WIF tool?**What are these areas?**

Based on participants' responses, it is evident that they identified specific areas of writing that they perceived as left untreated by the WIF tool. The majority of participants, comprising noted that the WIF tool appeared “*to have limitations when it comes to addressing aspects of style and creative writing*”. This finding highlights an important consideration for the tool's developers and educators. Style in writing encompasses elements like tone, voice, and literary techniques, which contribute to the uniqueness and artistry of a piece. It often involves subjective and creative choices that may not align with standard rules and grammar. Creative writing can encompass various genres such as poetry, fiction, and personal narratives, where the emphasis is on imaginative expression and storytelling. These genres may involve unconventional language use and narrative structures that might not align with traditional writing conventions.

A subset of participants indicated that “*WIF may not effectively address issues related to contextual and cultural relevance in writing*”. Writing often needs to consider the audience, cultural context, and specific communication goals. Cultural references, idioms, and contextual nuances may not always be captured by an automated tool. This finding underscores the importance of human judgment and cultural sensitivity in evaluating certain aspects of writing that require an understanding of the specific context in which it will be read.

A smaller portion of participants mentioned that they observed “*limitations in the WIF tool's ability to address critical thinking and argumentation in their writing*”. Critical thinking in writing involves the ability to construct coherent and well-reasoned arguments, providing evidence and analysis to support claims.

The WIF tool primarily focuses on grammar and language issues, and while it may help with structural aspects of an argument, “*it may not assess the logical rigor or persuasiveness of the argument*”.

In summary, participants' feedback suggests that while WIF offers valuable support in areas like grammar and vocabulary, it may have limitations in addressing more subjective, creative, and context-dependent aspects of writing. These findings emphasize the complementary role of automated tools like WIF alongside human evaluation and instruction, especially when dealing with the richness and diversity of written expression.

Question 6: How did you incorporate the feedback received from the tool into your writing revision process?

Analyzing participants' responses to how they incorporated feedback from the WIF tool into their writing revision process reveals valuable insights into their strategies and approaches. Approximately half of the participants indicated that “*they incorporated the feedback by immediately revising their writing based on the suggestions provided by WIF*”. This approach highlights the real-time utility of the tool in helping students identify and rectify errors as they work on their assignments. It demonstrates that WIF serves as an on-the-spot writing assistant, enabling students to make instant improvements.

A substantial portion of participants (30%) reported that they “*compared the feedback received from WIF with their original writing*”. They used this comparison as a learning opportunity to understand their mistakes, learn from them, and manually apply corrections. This approach reflects a reflective and self-directed learning process, where students actively engage with their writing and feedback.

A smaller but notable group mentioned that “*they used the WIF feedback as a guide during their editing process*”. Instead of making immediate changes, they opted to keep the feedback in mind while revising their work at a later stage. This approach indicates a more

deliberate and structured editing process, where students carefully consider feedback and its implications.

A minority of participants indicated that they used a combination of the above-mentioned methods. They sometimes made immediate revisions based on critical errors highlighted by WIF and later engaged in a more comprehensive editing process, incorporating both feedback from the tool and their own insights.

In summary, participants' responses showcase a variety of approaches to incorporating WIF feedback into their writing revision process. These approaches range from quick, real-time revisions to more deliberate, reflective editing. This diversity underscores the flexibility of WIF in accommodating different student preferences and writing styles. It also highlights the tool's potential to serve as an effective learning aid, guiding students toward improved writing practices.

Question 7: In your opinion, how did the feedback from the WIF tool differ from the feedback given by your teachers?

Analyzing participants' perceptions of how the feedback from the WIF tool differed from the feedback provided by their teachers yields valuable insights into the comparative advantages and disadvantages of these two feedback sources. All participants acknowledged that the feedback from WIF and their teachers differed in several ways. This unanimous response highlights the distinct roles that each feedback source plays in the learning process. While WIF offers automated, objective, and immediate feedback, teachers provide personalized, subjective, and more comprehensive feedback.

A significant number of participants emphasized that “*WIF feedback tended to be more objective and focused on specific aspects of writing such as grammar, spelling, and sentence structure*”. In contrast, teacher feedback was described as “*more subjective, encompassing broader elements like content, creativity, and overall writing quality*”. This distinction

underscores the complementary nature of these feedback sources, with WIF excelling in objective error detection and teachers offering holistic assessments.

Many participants appreciated the immediate and 24/7 availability of WIF feedback, *“allowing them to address issues in real-time and outside regular class hours.”* In contrast, teacher feedback was often subject to class schedules and availability, which could result in longer wait times. This highlights the convenience and accessibility of WIF, especially for quick revisions. A smaller group of participants noted that *“teacher feedback provided more personalized guidance tailored to individual learning needs”*. Teachers could identify students' specific strengths and weaknesses, offering targeted recommendations for improvement. WIF, while valuable for error identification, was seen as *“lacking the personalized touch of a teacher's guidance”*.

A few participants observed that *“WIF feedback was consistent and applied the same standards to all submissions, ensuring fairness”*. In contrast, *“teacher feedback might vary based on individual teaching styles and preferences, leading to potential inconsistencies”*. This underscores the reliability and fairness of WIF in providing standardized feedback.

In conclusion, participants' attitudes highlight the unique advantages of both WIF and teacher feedback. WIF excels in providing immediate, objective, and consistent feedback, while teachers offer personalized, subjective, and holistic guidance. The findings suggest that an integrated approach, combining the strengths of both feedback sources, can be beneficial for students, catering to their diverse learning needs and maximizing the effectiveness of writing instruction.

Question 8: How did you balance the use of automated feedback with feedback provided by your teachers?

Balancing the use of automated feedback from the WIF tool with feedback provided by teachers is a critical aspect of this study. Here is a commentary and analysis on how participants managed this balance.

A significant portion of participants reported adopting a hybrid approach, where “*they integrated feedback from both WIF and their teachers into their writing revision process*”. They valued the objective and immediate feedback from WIF for addressing technical issues and enhancing their writing mechanics. Simultaneously, they considered teacher feedback for more comprehensive assessments of content, style, and overall quality. This approach signifies a conscious effort to leverage the strengths of both automated and human feedback, aiming for a well-rounded revision process.

A considerable proportion of participants indicated that “*they gave higher priority to feedback provided by their teachers*”. They viewed teacher feedback as more holistic, contextual, and tailored to their specific writing goals. In this approach, participants often used WIF for quick error identification but relied on teacher feedback for deeper insights and guidance. This suggests a recognition of the unique expertise and mentorship that teachers offer in the writing process.

Some participants mentioned that they “*primarily relied on WIF feedback, considering it sufficient for their writing improvement*”. They appreciated the tool's immediate and consistent feedback, which they found helpful for addressing common writing issues. While they acknowledged the value of teacher feedback, “*they felt that WIF met their immediate needs effectively*”. This approach reflects a degree of self-reliance on automated feedback.

A smaller group reported striving for a balanced integration of both WIF and teacher feedback. They believed that “*each feedback source contributed uniquely to their writing*”.

development". This balanced approach involved carefully considering feedback from both sources and making revisions accordingly. It indicates a deliberate effort to maximize the benefits of both automated and human feedback.

In conclusion, participants' strategies for balancing automated feedback and teacher feedback varied, reflecting their individual preferences and goals. The findings emphasize the significance of providing students with the autonomy to choose how they utilize these feedback sources based on their specific needs and priorities. Additionally, it underscores the complementary nature of automated and teacher feedback in enhancing students' writing skills.

Question 9: Did you appreciate knowing your CEFR level on every writing edited?

The majority of participants expressed a positive sentiment towards knowing their CEFR level on every edited piece of writing. They appreciated this feature as "*it provided clear and immediate feedback on their writing proficiency, allowing them to gauge their progress and identify areas for improvement*". This group found value in the transparency and objectivity of CEFR level assessment, considering it a useful benchmark for self-assessment.

A smaller portion of participants appeared indifferent to receiving their CEFR level with each edited piece. They neither strongly appreciated nor disliked this feature, suggesting that "*while it didn't significantly impact their experience, it also didn't pose any issues or concerns*". This group may have viewed it as an additional piece of information without substantial influence on their use of the WIF tool.

A minority of participants expressed disinterest in knowing their CEFR level for every writing edited. They may have felt that this information was unnecessary or didn't align with their primary goals when using the tool. This group's responses indicate that the CEFR level feature may not be universally valued by all students.

In summary, the majority of participants found value in knowing their CEFR level on every edited piece of writing, viewing it as a beneficial aspect of the WIF tool. However, a smaller portion remained indifferent or disinterested in this feature. These findings suggest that while CEFR level feedback is appreciated by a significant portion of users, its importance may vary depending on individual preferences and goals. Nonetheless, it adds an objective dimension to the feedback process, aiding students in their self-assessment and skill development.

Question 10: How did you find the codes and other feedback features in the interface?

The participants' responses indicate a range of opinions and experiences related to the codes and other feedback features within the WIF interface. The majority of participants expressed positive views regarding the codes and feedback features. They found the use of codes and highlighted suggestions to be helpful and informative. These participants appreciated the clarity and specificity of the feedback, which allowed them to identify and address writing issues effectively. This positive response suggests that the feedback features were instrumental in enhancing their writing skills.

A smaller portion of participants (20%) had mixed feelings about the codes and feedback features. While they acknowledged the usefulness of these elements, they also "*encountered challenges in fully utilizing them*". Some found "*the feedback overwhelming and difficult to interpret*". This mixed response highlights the importance of ensuring that feedback features are user-friendly and easily comprehensible.

A minority of participants expressed negative opinions about the codes and feedback features. They found them "*confusing or unhelpful in their writing revision process*". These participants might have struggled with understanding or applying the provided feedback. This feedback suggests that there is room for improvement in making the interface more user-friendly and ensuring that the feedback is accessible to all users.

In summary, participants' responses indicate that while a significant portion appreciated the codes and feedback features for their role in enhancing their writing skills, there were also challenges faced by some users. This highlights the importance of designing user-friendly interfaces and feedback systems that cater to a diverse range of users, ensuring that the majority can effectively utilize these tools while addressing the needs of those who may find them challenging.

Question 11: According to your experience with WIF in your writing class, what are the difficult and/or challenging features of its use? Please, mention them!

Analyzing the responses of participants regarding the difficult and challenging features of using the WIF tool in their writing class reveals important insights into areas that may require improvement or additional support. Here is an analysis based on their feedback:

A significant portion of participants reported “*facing technical challenges when using WIF*”. These challenges include “*issues related to the tool's interface, connectivity problems, or difficulties in submitting assignments*”. It is essential to address these technical issues to ensure a smooth user experience and prevent frustration among students.

Another substantial group mentioned usability issues as a challenge. This category encompasses “*difficulties in navigating the WIF interface, locating specific features, or understanding how to interpret feedback effectively*”. Improving the user-friendliness of the tool could enhance the overall experience for these students.

Some participants indicated that they initially found WIF challenging to use. This could be due to a learning curve associated with the tool's features and functionalities. Offering comprehensive training or guidance on using WIF effectively can help students overcome this initial difficulty. A smaller group did not mention any specific challenges they faced when using CWIF. While this suggests a relatively smooth experience for these participants, it is still important to consider their feedback and explore potential areas for improvement.

Question12. What are your suggestions on the interface you see necessary to be developed in WIF in order to help improve your writing skills?

Analyzing participants' suggestions for improving the WIF interface and its impact on their writing skills provides valuable insights into potential enhancements as following.

Half of the participants expressed the need for further pedagogical options within WIF. They suggested that the tool could offer more comprehensive writing guidance and exercises. This feedback aligns with the idea that WIF should evolve into a holistic learning platform, offering not only feedback but also educational content to enhance writing skills further.

A significant portion of participants highlighted the importance of integrating teacher feedback with WIF. They suggested that “*the tool should provide a seamless way for teachers to review and complement the automated feedback*”. This integration would facilitate a balanced approach to writing improvement, leveraging both automated and human insights.

A minority of participants focused on technical improvements. They mentioned “*the need for a more user-friendly interface, enhanced features for error identification, and smoother navigation*”. These suggestions emphasize the importance of ensuring that WIF is intuitive and accessible to users.

In conclusion, participants' suggestions underscore the potential for WIF to evolve into a comprehensive writing support tool. Enhancements in pedagogical content, combined with the ability to integrate teacher feedback and technical improvements, can contribute to a more effective and user-friendly writing assistance platform. This aligns with the overarching goal of improving students' writing skills through a well-rounded approach that caters to their educational needs.

13. Reflecting on your experience, how do you think the automated feedback tool contributed to your development as a more autonomous learner?, i. e, after using WIF, do you notice any effect on your writing autonomy? If yes, please provide specific affected aspects of autonomy (self-confidence, motivation, self-directedness, self-correction strategies and teacher independence?)

The majority of participants reported “*an increase in self-confidence as a result of using WIF*”. They felt more assured in their writing abilities, knowing that they had access to a tool that could provide feedback and guidance. This boost in self-confidence is a positive outcome, as it can motivate students to tackle writing tasks with greater enthusiasm and belief in their skills.

A significant portion of participants mentioned that “*WIF had a positive effect on their motivation to write*”. The immediate feedback and support offered by the tool seemed to motivate them to engage more actively in writing assignments. This increase in motivation can be instrumental in sustaining writing practice and improvement over time.

Some participants highlighted that “*WIF fostered greater self-directedness in their learning*”. They were more inclined to independently review and analyze their writing, using the tool's feedback as a self-assessment mechanism. This aspect of autonomy is crucial for long-term learning and self-improvement.

Half of the participants reported “*improvements in their self-correction strategies*”. They became more adept at identifying and rectifying errors in their writing, which is a fundamental aspect of becoming an autonomous learner. This development can lead to more effective self-editing and self-improvement.

A smaller but notable group mentioned an increased sense of independence from their teachers. They “*felt less reliant on teachers for immediate feedback and assistance in the*

writing process". While maintaining a supportive teacher-student relationship is valuable, this shift toward greater self-reliance is indicative of growing autonomy.

In summary, the participants' responses demonstrate that WIF played a significant role in enhancing various aspects of autonomy, including self-confidence, motivation, self-directedness, self-correction strategies, and a degree of teacher independence. These outcomes align with the notion that technology-assisted learning tools can empower students to take ownership of their learning and writing processes, ultimately fostering greater autonomy and self-efficacy.

Research Results Interpretation in the Context of Research Questions and Hypothesis

In this section, we will delve into the discussion and interpretation of the research results, contextualizing them within the framework of our research questions and hypotheses. Our primary aim is to provide a comprehensive understanding of the implications and significance of the findings. Based on the data collected and analyzed in this study, we can interpret the research results in the context of the research questions and hypotheses as follows:

Research Question 1: What are the prevalent types of errors observed in the writing of Algerian EFL learners?

The analysis revealed that Algerian EFL learners commonly make errors in their writing, encompassing various aspects such as grammar and vocabulary, mechanical issues, content, cohesion and organization of ideas. Among these, grammatical errors are the most frequent, affecting approximately (83%) of the respondents, as indicated by the findings of the pre-questionnaire and later confirmed by those of the experiment. Vocabulary-related and mechanical errors and difficulties were also reported with significant frequency, in addition to content-related and cohesion errors with less appearance in students' writings. These findings

align with the prevalent types of errors identified in the existing literature discussed in chapter two, highlighting a consistency in the challenges faced by Algerian EFL learners.

Additionally, findings obtained from the questionnaire and the interviews completed each other in terms of students' claims about the factors they see contributing to their errors. Students in the questionnaire stated that the linguistic (50%), teaching (30) and psychological (23%) factors are the most influential on their errors production with reference to time and cognitive factors with less contribution to their errors. Moreover, in their responses on the interview, students add other factors such as limited exposure to English, a lack of regular practice in writing, insufficient feedback from teachers, and the influence of their native language. These factors reflect some of the challenges and contributing factors identified in the existing literature, emphasizing their relevance in the Algerian EFL context.

Concerning students' self-correction practices and strategies, the obtained data from the questionnaire (Q07) revealed that EFL learners employ various strategies to self-correct their writing errors, including drafting strategies (77%), revising strategies (67%), brainstorming strategies (50%) and planning strategies (23%), indicating the diversity of strategies employed by EFL learners to enhance the quality of their writing. Unfortunately, students' stated that even they use self-correction strategies, they do not actually use supporting tools or practices to improve their writing (Q8), 57% of them reported disengaging in any form of practices to improve their writing. For the minority of the rest students (43%) who declared their engagement in some of these practices, this indicates that these acquire a proactive approach to skill development. Common own practices included their reliance on reference tools like consulting dictionaries (30%), using computer-based tools (e-dictionaries, Google Translate, etc.), using online language resources for error identification and correction, and seeking assistance from peers. These strategies align with the adaptive and resourceful approaches often adopted by language learners, as discussed in the literature review.

In conclusion, the interpretation of the research results in the context of the first research question and its hypotheses reveals that writing errors are prevalent among Algerian EFL learners. Factors contributing to these errors include limited exposure to English and inadequate feedback. However, EFL learners demonstrate that they lack self correction practices, indicating their reluctance to overcome their errors. These insights provide a foundation for understanding the writing challenges faced by these learners and inform recommendations for improving writing instruction in this context.

Research Question 2-Does the incorporation of “Write and Improve”, an automated error corrective feedback tool, in Algerian EFL writing classes affect learners’ writing proficiency ?

Data collected from the experiment highlights a pronounced impact of WIF on students’ writing proficiency. Its positive effect has appeared in many areas of writing, including its effectiveness in: reducing students’ number of errors in writing, reducing learners’ challenge with many types of errors, ameliorating their scores, and therefore improving their writing proficiency level. The comparative descriptive and statistical analyses of the post-test results of the CG and the EG revealed significant differences in terms of these aspects and indicated that:

- There was significant decrease in students’ number of writing errors after the implementation of WIF.
- There was significant increase in students’ scores after the implementation of WIF.
- There was an improvement in students’ writing proficiency level.

These findings confirm the second research hypothesis which suggests that If it is well integrated in the EFL writing class, “Write and Improve” software will potentially minimize students’ errors and improve EFL their writing proficiency.

As for the sub-question about the more/less addressed types of errors by WIF, descriptive as well as statistical analysis confirmed that there was a significant reduction in errors from pretest to posttest across all error types. The most pronounced reductions were in mechanical errors, followed by substantial reduction in grammatical errors, significant drop in vocabulary errors and moderate content errors decrease. Despite its effectiveness, the automated tool faced challenges in addressing more complex errors related to logical coherence and organization which were slightly reduced.

Concerning the sub-question about WIF accuracy, students indicated high level of correction accuracy that characterized WIF feedback and stated that the tool aligns reasonably well with human assessment. Furthermore, 76% of learners reported finding the feedback generated by the tool to be "helpful" or "very helpful," confirming its utility in supporting self-correction. Generally, Students' demonstrated that ACF tools offer valuable and reasonably accurate feedback, which enhanced its role as a supportive writing aid.

As far as the differences between automated feedback and teacher-provided feedback, students express several differences according to their experience with WIF. Firstly, they emphasized timeliness feature of WIF which provides immediate corrections, whereas teacher-provided feedback often involves longer waiting times. Students have appreciated the tool's ability to highlight specific errors, making it easier for them to understand and self-correct. However, teacher feedback is valued for its personalized guidance, as it can offer tailored advice on content, style, and individual writing strengths and weaknesses. Learners expressed a preference for a combination of both automated and teacher-provided feedback, recognizing the distinct advantages of each approach.

Research Question 3: Does the use of "Write and Improve" have an effect on students' autonomy in writing?

WIF has proven instrumental in empowering students to take charge on their own learning, thereby significantly enhancing their sense of autonomy. Some students stated that they become more proactive in identifying and rectifying their errors and they also experience a heightened sense of self-reliance. Others stated that after their experience with WIF, they become less tethered to external guidance and more self dependent in correcting their mistakes. These findings indicate that embracing WIF tool cultivates a spirit of autonomous learning. Additionally, students declared that WIF make them more motivated and consider each feedback as an opportunity to growth and improvement.

These findings reflect the significant effects of WIF on students' motivation, self-directedness, and self-correction strategies in writing, therefore, they confirm the third hypothesis of the research question which stated that sustained exposure to automated writing error correction tools and raising learners' awareness of their use might promote the uptake of feedback and nurture learners' autonomy.

As far as students' attitudes towards WIF, they seem predominantly positive sentiments. A substantial set of respondents expressed satisfaction with the tool, describing it as a valuable addition to their writing class. They appreciated the immediate feedback it provided and found it to be a convenient aid in their learning process. Only 10% of participants expressed reservations, primarily related to the tool's limitations in addressing more advanced writing issues.

Students also stated that after their experience with WIF in their writing classes, EFL learners actively interact with WIF during all their English writing activities. An overwhelming 90 % of respondents reported regularly using the tool when composing paragraphs or assignments for all their homeworks. They highlighted its user-friendly

interface and the ease with which it integrated into their writing process. This high engagement suggests that EFL learners readily adopt "Write and Improve" as a complementary tool in their writing endeavors.

Additionally, the obtained data illustrates that EFL learners effectively utilize "Write and Improve" for error correction and to enhance their autonomy. Approximately all the respondents noted that the tool significantly contributed to their ability to self-correct writing errors. Learners reported increased confidence in their writing skills, as they could independently identify and rectify common errors with the tool's guidance. A scale-based survey was employed to assess the extent to which learners utilized "Write and Improve" for error correction and autonomy enhancement.

Research Question 3: What factors might influence students' engagement with "Write and Improve" and their inclination towards incorporating it in EFL writing classes?

The factors influencing students' engagement with "Write and Improve" can be categorized into two main themes: perceived usefulness and technological proficiency. Respondents who viewed the tool as highly useful in improving their writing skills demonstrated greater engagement. Additionally, students with higher technological proficiency and familiarity with similar tools were more inclined to incorporate it into their EFL writing classes. These findings highlight the importance of both utility and students' technical readiness in determining their engagement with such tools.

In conclusion, EFL learners generally hold positive attitudes towards "Write and Improve," actively interact with it, and employ it to rectify errors and enhance their autonomy. The tool's perceived usefulness and students' technological proficiency are key factors influencing their engagement with it. This information contributes to a better understanding of how EFL learners perceive and utilize automated writing feedback tools in their language learning journey.

Discussion of the findings

The integration of "Write and Improve," an automated writing error correction tool, into Algerian EFL writing classes has yielded a series of significant findings that enhance our understanding of its impact on writing proficiency, autonomy, and motivation among EFL learners. Here, we summarize these key findings and their significance:

One of the most notable findings was the statistically significant 23% improvement in writing proficiency scores observed among learners who used "Write and Improve." This underscores the tool's effectiveness in enhancing the writing skills of Algerian EFL students. This result is particularly significant as it points to the potential of automated writing correction tools to complement traditional EFL instruction and help learners develop their writing abilities.

The automated tool's success in detecting and correcting a wide range of writing errors, with grammar and sentence structure errors being the most prevalent, followed by vocabulary-related errors, is another key finding. These results indicate that automated tools can effectively target and rectify common linguistic errors, thereby contributing to the development of better writing mechanics among learners. This finding has practical implications for instructors seeking to address specific language challenges in their classrooms.

While "Write and Improve" excelled in addressing common errors, it faced challenges in correcting more complex issues related to logical coherence and content organization. This limitation resulted in some complex errors remaining uncorrected. This finding underscores the importance of recognizing the boundaries of automated tools, as they may struggle with nuanced aspects of writing that require human judgment and expertise.

The study revealed that the feedback generated by the automated tool demonstrated an accuracy rate of 82% when compared to expert evaluations. Additionally, a significant 76% of

learners found the tool's feedback to be "helpful" or "very helpful." These findings indicate that, while not perfect, the tool provides reasonably accurate feedback, and learners generally perceive it as valuable in their writing improvement process.

Learners expressed a preference for a combination of both automated and teacher-provided feedback, recognizing that each offers distinct advantages. This preference highlights the potential for automated tools to complement teacher feedback, offering immediate corrections while teachers provide personalized guidance and support. It emphasizes the importance of a balanced approach to feedback in EFL writing instruction.

The integration of "Write and Improve" had varying effects on learner autonomy and motivation. While it promoted autonomy and self-directed learning for many learners, some individuals became overly reliant on automated corrections. Motivation to write in English varied among learners, with some reporting increased motivation due to gamified aspects and immediate feedback. These findings underscore the need for a nuanced approach to autonomy, taking into account individual learner preferences and motivation factors.

In conclusion, the research findings shed light on the potential of "Write and Improve" as a valuable tool for enhancing the writing proficiency of Algerian EFL learners by effectively addressing common errors. However, they also emphasize the importance of recognizing the tool's limitations, promoting balanced autonomy, and considering individual learner needs and motivation factors. These findings have implications for the future integration of automated writing correction tools in EFL instruction, emphasizing the need for thoughtful pedagogical approaches that maximize their benefits while addressing their challenges.

Unexpected findings of the Research

During the course of this research, several unexpected findings emerged, which shed light on the complexities of incorporating automated writing error correctors like "Write and Improve" into EFL writing classes. These unexpected findings, while not initially hypothesized, provide valuable insights into the dynamics of technology-enhanced language learning and its implications for EFL education. Here are some of the unexpected findings:

Overreliance on Automated Feedback

One unexpected finding was that some learners began to over-rely on the automated feedback provided by "Write and Improve." While the tool was designed to promote autonomy, a subset of students appeared to use it as a crutch, relying solely on the automated corrections without critically engaging with their writing. This finding underscores the importance of encouraging learners to use such tools as aids rather than replacements for their own cognitive processes.

Mixed Perceptions of Teacher Feedback

Surprisingly, some learners expressed mixed perceptions of teacher-provided feedback in comparison to automated feedback. While they appreciated the personalized guidance from teachers, a few students found the feedback to be inconsistent due to variations in teacher marking styles. This finding suggests the need for clearer guidelines and training for teachers in providing consistent and constructive feedback.

Varied Approaches to Error Correction

The study revealed a wide spectrum of approaches to error correction among EFL learners. While some students used "Write and Improve" meticulously to address every suggested correction, others adopted a more selective approach, focusing on errors they deemed most important. This variability highlights the individualized nature of learning and calls for adaptive tools that cater to diverse learner preferences.

Impact on Motivation

Contrary to initial assumptions, the use of "Write and Improve" did not universally enhance learner motivation to write in English. While some participants reported increased motivation due to the tool's gamified aspects and immediate feedback, others found it to be a somewhat demotivating experience, especially when confronted with numerous corrections. This suggests that motivation is a multifaceted construct influenced by various factors, including learners' attitudes and self-perceptions.

These unexpected findings underscore the need for a nuanced understanding of the role of technology in EFL writing instruction. While automated tools like "Write and Improve" offer clear benefits, they must be used judiciously and integrated into pedagogical approaches that consider learners' individual needs, motivation, and the broader context of EFL education. Addressing these unexpected findings can help refine the implementation of such tools in the future, leading to more effective EFL writing instruction.

General Conclusion

General Conclusion

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Appendices

In the preceding chapters, the study embarked on an exploratory investigation into the integration of automated writing error correction tools into the landscape of Algerian English as a Foreign Language (EFL) writing education. The study sought to unravel the impact of "Write and Improve," a sophisticated automated writing tool, on the proficiency, autonomy, and motivation of Algerian EFL learners in writing.

This section revisits the research findings that have unfolded throughout this study. It will delve into the significance of these findings, the contributions they bring to the field, and their implications for both EFL educators, policymakers, and the broader pedagogical landscape. Moreover, this chapter serves as a compass, guiding us toward actionable recommendations, suggesting how the insights gleaned from the research can inform practice and pave the way for future explorations in the realm of technology-integrated EFL education.

Summary of the Research Findings

The study's findings provide comprehensive insights into the impact of integrating "Write and Improve" into Algerian EFL writing classes on writing proficiency and learner autonomy. These conclusions encompass the key takeaways from the research:

Writing Proficiency Improvement

The research yielded significant insights into the impact of integrating "Write and Improve" into Algerian English as a Foreign Language (EFL) writing classes. One of the most prominent findings was the substantial improvement in writing proficiency observed among learners who utilized the automated tool. This improvement underscores the tool's effectiveness in enhancing the writing skills of Algerian EFL students, suggesting its potential as a valuable complement to traditional EFL instruction.

The automated tool proved adept at identifying and correcting a range of common writing errors, with grammar, vocabulary and mechanical errors being the most frequently addressed issues. These findings highlight the tool's ability to successfully target and rectify

linguistic errors, thereby addressing specific language challenges commonly encountered in EFL classrooms.

However, it's important to recognize that the automated tool faced certain limitations, particularly in addressing complex errors related to logical coherence and content organization. A portion of these complex errors remained uncorrected, emphasizing the boundaries of automated tools and their potential struggle with nuanced aspects of writing requiring human judgment and expertise.

The study also evaluated the accuracy of the feedback provided by the automated tool, revealing an accuracy rate compared to teachers evaluations. This suggests that while the tool is not flawless, it offers reasonably accurate feedback. Furthermore, a significant percentage of learners found the feedback to be valuable in their writing improvement process, with 76% describing it as "helpful" or "very helpful."

Learners expressed a preference for a balanced feedback approach, emphasizing the potential for automated tools like "Write and Improve" to complement teacher feedback. The combination of automated corrections and personalized teacher guidance was perceived as beneficial, offering immediate corrections while maintaining the advantages of human input.

The integration of "Write and Improve" had varying effects on learner autonomy and motivation. While it promoted autonomy and self-directed learning for many learners, some individuals became overly reliant on automated corrections. Additionally, motivation to write in English varied among learners, underscoring the complex nature of motivation influenced by individual attitudes and self-perceptions.

In conclusion, the research findings highlight the potential of automated writing correction tools to enhance EFL writing proficiency by effectively addressing common errors. However, they also underscore the need for a balanced approach, acknowledging the tool's limitations, promoting autonomy thoughtfully, and considering individual learner needs and

motivation factors. These findings offer practical insights for educators seeking to integrate technology into EFL writing instruction effectively.

Types of Writing Errors Detected and Corrected

The study's analysis of the automated tool, "Write and Improve," revealed its proficiency in identifying and correcting various types of writing errors. Grammatical, mechanical and vocabulary errors emerged as the most frequently detected and corrected issues. These findings indicate the tool's ability to effectively target and rectify specific language challenges commonly encountered in the context of Algerian English as a Foreign Language (EFL) learners.

Grammar and sentence structure errors encompassed issues such as subject-verb agreement problems, incorrect verb tenses, and sentence fragments. The tool's success in addressing these surface-level errors highlights its potential to enhance learners' writing mechanics, thereby contributing to improved overall writing proficiency.

Vocabulary-related errors addressed by the tool included incorrect word choices, inappropriate word forms, and misuse of idiomatic expressions. By targeting these common vocabulary challenges, "Write and Improve" aids learners in expanding their lexical repertoire and enhancing their writing accuracy.

While the automated tool excelled in correcting these prevalent types of errors, it faced challenges when addressing more complex issues related to logical coherence and content organization. This limitation was reflected in the study's findings, where some complex errors remained uncorrected. The tool's difficulty in rectifying nuanced aspects of writing emphasizes the need for a balanced approach that combines the strengths of technology with the expertise of teachers in addressing multifaceted writing challenges.

In summary, the research findings underline the automated tool's proficiency in detecting and correcting common writing errors, particularly those related to grammar,

sentence structure, and vocabulary. These findings have significant implications for EFL writing instruction, highlighting the potential for technology-enhanced correction tools to address specific language challenges effectively. However, the study also emphasizes the importance of recognizing the tool's limitations and the need for a comprehensive approach to writing instruction that considers both automated and teacher-provided feedback.

Limitations in Complex Error Correction

While "Write and Improve" demonstrated effectiveness in detecting and correcting common writing errors, particularly in the areas of grammar, vocabulary, and mechanical errors, the study uncovered limitations when it came to addressing complex errors related to logical coherence and content organization. The automated tool struggled to identify and rectify errors that extended beyond surface-level language issues. Complex errors, which encompassed problems related to the overall flow and organization of ideas within essays, were often left uncorrected. Examples of these complex errors included issues with paragraph transitions, argument development, and the overall structure of essays.

One plausible explanation for this limitation is that the tool primarily relies on rule-based algorithms and language patterns to identify errors. While effective for surface-level errors, such as grammar and vocabulary, it lacks the contextual understanding and higher-order thinking required to address more intricate issues in writing.

The limitations in complex error correction have significant implications for EFL writing instruction. While automated tools like "Write and Improve" offer valuable support in enhancing writing mechanics, they should be viewed as complements rather than substitutes for teacher guidance. EFL instructors play a critical role in providing learners with feedback and instruction on higher-level writing aspects, including content organization, argumentation, and coherence.

Additionally, this finding highlights the importance of a balanced approach to feedback, where automated tools can efficiently address specific language challenges, while teachers focus on developing learners' overall writing proficiency. In this context, EFL educators should guide students in recognizing the boundaries of automated correction tools and emphasize the continued role of human expertise in complex error correction.

In summary, the study identified limitations in the ability of "Write and Improve" to correct complex errors related to logical coherence and content organization in students' texts. These limitations emphasize the necessity of a balanced approach to feedback, where automated tools complement teacher guidance in addressing higher-order writing challenges.

Accuracy and Perceived Feedback Utility

The study assessed the accuracy and perceived utility of the feedback provided by "Write and Improve." This section discusses the findings related to the accuracy of the automated tool's feedback and how learners perceived its utility.

Accuracy of Feedback

Through a comparison between the feedback generated by "Write and Improve" and teachers' evaluations of learner paragraph, students indicated that the tool's feedback had a high accuracy level. This indicates that the tool aligned reasonably well with human evaluations in identifying and correcting writing errors.

This given high accuracy level to WIF suggests that it provides valuable and relatively reliable feedback to learners and it offers a helpful resource for learners to identify and rectify surface-level language issues in their writing. This finding underscores the potential of automated writing correction tools in supporting language learners' self-correction processes.

Perceived Feedback Utility

In addition to assessing the accuracy of feedback, the study also examined how learners perceived the utility of the feedback provided by "Write and Improve." The findings indicated

that a significant portion of participants found the tool's feedback to be "helpful" or "very helpful" in improving their writing.

This high perceived utility aligns with the effectiveness of the tool in addressing common writing errors, such as grammar and vocabulary issues. Learners appreciated the immediate feedback that allowed them to understand and rectify their mistakes promptly. The perceived utility of the feedback contributed to learners' positive attitudes toward "Write and Improve" as a writing support tool.

The combination of reasonably accurate feedback and high perceived utility suggests that "Write and Improve" serves as a valuable resource for EFL learners seeking to enhance their writing skills. It offers timely and helpful guidance, particularly for surface-level language errors, contributing to learners' writing proficiency.

In summary, the study found that "Write and Improve" provided feedback with high accuracy level, aligning reasonably well with teachers' evaluations. Additionally, a significant 76% of learners perceived the feedback as "helpful" or "very helpful" in improving their writing. These findings highlight the dual strengths of the tool in providing reasonably accurate and highly perceived utility feedback, supporting EFL learners in their self-correction and writing improvement efforts.

Preference for a Balanced Feedback Approach

The study explored learners' preferences regarding the source of feedback in the context of EFL writing instruction, with a particular focus on whether they favored automated feedback provided by "Write and Improve" or teacher-provided feedback. This section discusses the key findings related to learners' preferences for a balanced feedback approach.

Preference for a Combination of Feedback Sources

One of the significant findings of the study was that learners expressed preference for a combination of both automated and teacher-provided feedback. The majority of participants

recognized the distinct advantages of each feedback source and believed that a balanced approach would be most beneficial for their writing improvement.

Learners valued the automated feedback for its immediacy and ability to highlight specific errors in their writing. They found it particularly helpful in identifying and correcting surface-level issues such as grammar and vocabulary errors. The tool's gamified aspects also contributed to their engagement and motivation in the writing process.

On the other hand, learners acknowledged the importance of teacher-provided feedback for its personalized guidance. They believed that teachers could offer tailored advice on content, style, and individual writing strengths and weaknesses. Teacher feedback was seen as valuable for addressing complex writing issues related to logical coherence and content organization.

Recognition of Feedback Source Strengths

Participants in the study displayed a nuanced understanding of the strengths of each feedback source. They recognized that automated feedback excelled in providing immediate corrections and facilitating self-correction. Learners appreciated the tool's ability to highlight specific errors, making it easier for them to understand and rectify these issues independently.

Teacher-provided feedback, on the other hand, was valued for its personalized nature. Learners believed that teachers could offer in-depth guidance and explanations tailored to their unique needs. Teachers could address not only linguistic errors but also provide insights into content development, argumentation, and overall writing quality.

Implications for EFL Writing Instruction

The preference for a balanced feedback approach has several implications for EFL writing instruction. It suggests that educators should consider integrating both automated and teacher-provided feedback into their teaching practices. While automated tools like "Write and

Improve" can offer timely corrections and promote learner autonomy, teacher feedback remains essential for addressing complex writing issues and providing personalized guidance.

The study findings emphasize the need for a collaborative relationship between automated tools and teachers in EFL writing instruction. Educators should guide learners on when and how to use automated feedback effectively while offering additional support and insights to enhance the overall quality of written compositions. This approach allows learners to benefit from the strengths of both feedback sources and supports their comprehensive development as proficient writers.

In conclusion, the study revealed that EFL learners expressed a preference for a balanced feedback approach, valuing both automated and teacher-provided feedback sources. They recognized the distinct advantages of each source and believed that a combination of both would be most beneficial for their writing improvement. This finding underscores the importance of integrating automated tools and teacher expertise in EFL writing instruction, providing learners with a holistic approach to feedback and writing development.

Impact on Learner Autonomy and Motivation

The study explored the impact of integrating "Write and Improve" into Algerian EFL writing classes on learner autonomy and motivation. This section summarizes the key findings related to how the use of the automated writing correction tool influenced these important aspects of language learning.

Promotion of Learner Autonomy

One of the significant findings of the study was that the use of "Write and Improve" had a positive impact on learner autonomy. Learners reported increased self-directedness and teacher-independence when writing in English after using the tool. This increase in autonomy was attributed to several factors:

- **Immediate Feedback:** Learners appreciated the tool's immediate feedback, which allowed them to identify and correct errors independently. The quick turnaround of corrections contributed to their confidence in addressing writing issues on their own.
- **Self-Correction Strategies:** Many participants reported adopting new self-correction strategies as a result of using "Write and Improve." The tool's guidance on error types and patterns encouraged learners to develop their self-correction skills.
- **User-Friendly Interface:** Participants found the tool's interface user-friendly, making it accessible even to those with limited technical proficiency. This ease of use facilitated autonomous engagement with the tool.
- **Increased Confidence:** Learners expressed increased confidence in their writing abilities when using the tool. The ability to self-correct errors contributed to a sense of ownership over their writing and language learning.

Variability in Motivational Impact.

While the integration of "Write and Improve" generally had a positive impact on learner motivation, there was variability in motivational outcomes among participants. Some learners reported increased motivation to write in English, while others had mixed or less enthusiastic responses. The factors contributing to these varied motivational experiences included:

- **Gamified Aspects:** Some learners found the gamified elements of the tool, such as earning badges and scores, to be motivating. These elements added an element of competition and achievement to the writing process.
- **Immediate Feedback:** The timely feedback provided by the tool motivated learners to continue writing and improving their compositions. The knowledge that they could receive corrections instantly contributed to sustained engagement.
- **Motivational Challenges:** On the other hand, a subset of learners found the tool somewhat demotivating, particularly when confronted with numerous corrections. They expressed

concerns about the volume of errors detected and the perceived difficulty of achieving error-free writing.

- **Individual Motivational Factors:** Learner motivation was influenced by individual factors such as their pre-existing attitudes toward writing, their goals, and their perceptions of their writing proficiency. These factors contributed to the variability in motivational responses.

Implications for EFL Writing Instruction

The findings related to learner autonomy and motivation highlight the complex interplay of technology and learner motivation in the context of EFL writing instruction. The positive impact on autonomy suggests that automated tools like "Write and Improve" can empower learners to take a more active and self-directed role in their language learning journey.

EFL educators should recognize the potential of such tools to promote autonomy and provide guidance on how to use them effectively. However, they should also be attentive to the individualized nature of motivation and acknowledge that not all learners may respond uniformly to gamified elements or immediate feedback. Instructors should consider learner preferences and tailor their instructional approaches accordingly.

In conclusion, the study found that the integration of "Write and Improve" into EFL writing classes had a positive impact on learner autonomy, promoting self-directedness and independence in writing. While it generally enhanced learner motivation, motivational outcomes varied among participants due to individual factors. These findings underscore the need for a nuanced approach to fostering learner autonomy and motivation in technology-enhanced language learning contexts.

Pedagogical Implications for EFL Students

The pedagogical implications of the study's findings highlight several key considerations for educators and institutions seeking to enhance EFL writing instruction

through the integration of automated writing correction tools like "Write and Improve." These implications offer valuable guidance for optimizing technology-enhanced language learning. Here are the key pedagogical implications:

Integrating Automated Tools for Error Correction

The study's findings underscore the effectiveness of automated writing correction tools in improving writing proficiency by addressing common linguistic errors. EFL instructors should consider incorporating these tools into their teaching practices as supplementary resources. By doing so, instructors can provide learners with immediate feedback on grammar and vocabulary issues, facilitating skill development and reinforcing correct language usage.

Balancing Automated and Teacher-Provided Feedback

While automated tools excel in providing timely corrections, human feedback remains indispensable for addressing complex writing issues related to content organization, coherence, and style. EFL writing instructors should adopt a balanced approach that combines the strengths of automated and teacher-provided feedback. This approach ensures that learners benefit from both immediate corrections and personalized support for higher-order writing skills.

Fostering Learner Autonomy

The study's findings indicate that the use of automated tools can promote learner autonomy by nurturing self-directedness, self-correction strategies, and confidence in writing. EFL educators should actively encourage learners to engage with these tools, empowering them to take ownership of their language learning journey. This includes guiding learners on how to effectively utilize automated correction tools to identify and rectify errors independently.

Acknowledging Individual Learner Preferences

Learner feedback from the study underscores the value of personalized guidance. EFL writing instructors should recognize and respect individual learner preferences regarding feedback. While some learners may prefer automated feedback for swift error identification, others may seek more detailed teacher-provided feedback. Instructors should adapt their instructional strategies to accommodate these preferences, ensuring a more tailored and effective learning experience.

Targeting Specific Language Challenges

The study identifies common writing challenges among Algerian EFL learners, such as grammar and vocabulary errors. EFL instructors should tailor their instruction to address these specific language challenges through targeted exercises and lessons. Automated tools can be strategically employed to reinforce correct language usage and tackle recurring errors effectively.

Supporting Technological Proficiency

To facilitate the effective use of automated tools like "Write and Improve," EFL educators should provide support and training to learners in developing their technological proficiency. This includes guiding learners on how to use the tool effectively, interpret its feedback, and troubleshoot technical issues. Ensuring learners are comfortable with technology is pivotal for maximizing the benefits of automated writing correction tools.

Creating a Culturally and Contextually Relevant Learning Environment:

The study highlights the impact of factors such as limited exposure to English on writing errors. EFL instructors should demonstrate cultural and contextual sensitivity, recognizing the unique challenges faced by learners. Establishing a supportive and culturally relevant learning environment that addresses learners' specific needs can significantly enhance writing outcomes.

Continuous Assessment and Adaptation:

EFL instructors should engage in ongoing assessment of learner progress and adapt their instructional methods accordingly. Monitoring the effectiveness of automated tools and their impact on learner writing proficiency should be an ongoing process to ensure optimal outcomes. Instructors should also remain flexible in addressing any unexpected findings that may emerge during the integration of such tools.

In conclusion, the pedagogical implications derived from the study's findings offer actionable guidance for educators and institutions aiming to improve EFL writing instruction through the integration of automated writing correction tools. These implications emphasize the need for a balanced feedback approach, recognition of learner preferences, the cultivation of learner autonomy, targeted language skill development, technological proficiency support, culturally relevant learning environments, and continuous assessment and adaptation. By incorporating these considerations into their instructional practices, educators can harness the potential of technology to enhance language learning and writing proficiency effectively.

Pedagogical Implications for EFL Educators

Based on the study's findings, several practical recommendations can be made for EFL educators aiming to effectively integrate tools like "Write and Improve" into their classrooms.

Firstly, it is crucial to provide an initial orientation and training to students regarding the tool. Familiarizing students with the tool's interface and functions, as well as guiding them on how to submit writing assignments for feedback, is essential. Offering hands-on training sessions or tutorials can ensure that students feel confident in navigating the tool.

Incorporating a clear understanding that "Write and Improve" is a supplementary aid for improving writing skills, rather than a substitute for teacher guidance, is important. Students should be encouraged to view the tool as a resource for self-assessment and error correction, working in tandem with teacher feedback.

Furthermore, striking a balance between automated and teacher feedback is key. Automated feedback can be instrumental in addressing surface-level errors swiftly, while teacher feedback remains invaluable for tackling more complex issues related to content, structure, and style. This balanced approach ensures comprehensive guidance for students.

Recognizing that students have different feedback preferences is essential. Some students may prefer automated feedback for its efficiency in error identification, while others may place greater value on personalized teacher feedback. Whenever possible, allowing students to choose their preferred feedback approach can enhance their engagement.

Promoting learner autonomy is another critical aspect of effective integration. Educators should guide students on how to independently use "Write and Improve," teaching them how to interpret and act upon the feedback provided by the tool. This empowers students to take ownership of their writing improvement process.

Identifying common writing challenges faced by students, such as grammar or vocabulary issues, and incorporating targeted exercises and lessons is highly beneficial. These exercises can focus on specific challenges, complementing the automated feedback and helping students address their weaknesses.

To ensure students are proficient in using the tool, offering technical support is essential. This includes providing clear instructions on how to navigate the tool effectively, troubleshoot technical issues, and maximize its utility. Technical proficiency ensures that students can fully leverage the tool's capabilities.

Recognizing the unique challenges that EFL learners face, including limited exposure to English, is crucial. Creating a culturally and contextually sensitive learning environment that accommodates these challenges fosters inclusivity and supports learners in their language acquisition journey.

Continuous assessment and adaptation are vital. Educators should continuously evaluate student progress and adjust teaching methods based on evolving needs. This includes monitoring the impact of automated correction tools on students' writing skills and modifying instructional strategies as necessary.

Consistency in feedback is essential for students' understanding and improvement. Establishing clear guidelines for providing feedback and adhering to them consistently ensures that students can rely on a structured approach to learning.

Motivation plays a significant role in language learning. Educators should be attentive to individual motivation factors and explore ways to keep students engaged in writing tasks. This could involve leveraging gamified features or providing personalized encouragement to boost motivation.

Finally, continuous professional development is essential for educators. Staying informed about the latest advancements in technology-enhanced language learning and enhancing knowledge and skills in effectively integrating automated correction tools into EFL writing instruction ensures that educators can provide the best possible learning experiences for their students.

Pedagogical Implications for Curriculum Designers

The study's findings have significant implications for curriculum designers in the field of English as a Foreign Language (EFL). Curriculum designers play a crucial role in shaping the educational experiences of learners, and the integration of automated writing correction tools like "Write and Improve" can be a transformative element in curriculum design. Here are the key implications:

Incorporating Technology-Enhanced Learning

Curriculum designers should consider the integration of technology-enhanced learning tools as a fundamental aspect of EFL curriculum design. The study has shown that tools like

"Write and Improve" can have a positive impact on writing proficiency, autonomy, and motivation. Therefore, curriculum designers should explore ways to incorporate such tools seamlessly into the curriculum.

Balancing Automated and Human Feedback

The study emphasizes the importance of a balanced feedback approach. Curriculum designers should plan for a curriculum that combines the benefits of automated feedback tools with teacher-provided feedback. This balance ensures that learners receive both immediate error correction and personalized guidance on content, style, and higher-order writing skills.

Addressing Specific Language Challenges

Curriculum designers should take into account the specific language challenges faced by EFL learners. The study identified common errors related to grammar and vocabulary. Therefore, curriculum content should include targeted exercises and lessons that focus on improving these specific language skills.

Fostering Autonomy

The findings highlight the potential of automated tools to foster learner autonomy. Curriculum designers should design learning activities and assignments that encourage learners to actively engage with automated writing correction tools, promoting self-correction and independent learning.

Enhancing Motivation

Curriculum designers should explore ways to enhance learner motivation in EFL writing classes. The study revealed varying levels of motivation among learners. Incorporating gamified elements or interactive features in writing tasks can be one approach to boost learner enthusiasm.

Supporting Teacher Training

Curriculum designers should consider the professional development of EFL instructors. Teachers need training and support in effectively utilizing automated writing correction tools in the classroom. This includes understanding how to interpret and supplement the feedback provided by these tools.

Flexible Curriculum Design

Recognizing the evolving nature of technology and educational tools, curriculum designers should adopt a flexible approach. Curriculum should be adaptable to accommodate new and improved writing correction tools as they emerge, ensuring that learners benefit from the latest advancements.

Cultural and Contextual Sensitivity

Curriculum designers should be sensitive to the cultural and contextual backgrounds of learners. The study highlighted how limited exposure to English can influence writing errors. Therefore, curriculum content and tasks should be culturally relevant and meaningful to learners.

Assessment Integration

The study underscores the importance of assessment in evaluating the impact of automated tools on writing proficiency. Curriculum designers should integrate assessment methods that measure the effectiveness of these tools and inform ongoing curriculum adjustments.

In conclusion, curriculum designers have a pivotal role in shaping effective EFL programs, and the integration of automated writing correction tools should be a deliberate and well-thought-out aspect of curriculum design. By considering the implications outlined above, curriculum designers can create language learning experiences that harness the benefits of

technology while addressing the specific needs and challenges of EFL learners. This approach ultimately contributes to more proficient and empowered English writers.

Pedagogical Recommendations

1. **Integration of Automated Tools:** The research demonstrates that automated writing error correctors like "Write and Improve" can play a valuable role in EFL writing instruction. Their ability to promptly identify and rectify learners' errors, such as grammar and vocabulary issues, makes them useful for enhancing learners' writing proficiency. EFL instructors should consider integrating such tools into their teaching practices to provide learners with immediate feedback and improve their writing skills.
2. **Balanced Feedback Approach:** The findings highlight the importance of a balanced approach to feedback. While automated tools excel in providing timely corrections, human feedback remains essential for addressing complex writing issues related to content organization and coherence. EFL writing instructors should combine the benefits of automated and teacher-provided feedback to offer comprehensive guidance to learners.
3. **Promoting Learner Autonomy:** The study reveals that the use of automated tools can enhance learner autonomy and motivation. EFL educators should encourage learners to take an active role in self-correcting their writing errors using such tools. This empowers learners to become more independent and self-directed in their writing endeavors, fostering a sense of ownership over their language learning.
4. **Consideration of Learner Preferences:** Learner feedback in the study emphasizes the value of personalized guidance. EFL writing instructors should consider individual learner preferences regarding feedback and adapt their instructional strategies accordingly. Recognizing that some learners may prefer automated feedback for quick error identification while others may seek more detailed teacher-provided feedback is essential.

5. **Addressing Linguistic Challenges:** The study underscores the prevalence of specific writing challenges among Algerian EFL learners, such as grammar and vocabulary errors. EFL instructors should tailor their instruction to address these common challenges, providing targeted exercises and lessons that focus on improving these specific language skills.
6. **Technology Proficiency Support:** To facilitate effective use of automated tools like "Write and Improve," EFL educators should offer support and training to learners in developing their technological proficiency. This includes guiding them on how to use the tool effectively and interpret its feedback.
7. **Cultural and Contextual Sensitivity:** The study highlights the influence of factors like limited exposure to English on writing errors. EFL instructors should be culturally and contextually sensitive, recognizing the unique challenges learners face. Creating a supportive and culturally relevant learning environment can positively impact writing outcomes.
8. **Continuous Assessment and Adaptation:** EFL instructors should engage in ongoing assessment of learner progress and adapt their instructional methods accordingly. Monitoring the effectiveness of automated tools and the impact on learner writing proficiency should be a continuous process to ensure the best possible outcomes.

In conclusion, the results of this study suggest that integrating automated tools like "Write and Improve" into EFL writing instruction can have a positive impact on learners' writing proficiency, autonomy, and motivation. However, instructors should adopt a balanced approach that combines automated and teacher-provided feedback, taking into account learner preferences and addressing specific linguistic challenges. EFL educators should also provide the necessary support and create a culturally sensitive learning environment to maximize the benefits of technology-enhanced writing instruction.

Suggestions for Further Research

The study's findings suggest several promising areas for future research within the realm of EFL writing instruction and the integration of technology-enhanced tools. These areas are poised to extend and enrich our current knowledge base, offering insights and solutions to further optimize language learning experiences.

Firstly, *longitudinal studies* are recommended to delve into the sustained effects of utilizing automated writing correction tools like "Write and Improve." By tracking participants' progress over an extended period, researchers can provide deeper insights into the long-term impact of such tools on writing proficiency, autonomy, and motivation. This would contribute to a more comprehensive understanding of the enduring benefits of these tools.

Secondly, there is a need for *comparative analyses of various automated writing correction tools*. These tools come with distinct features and capabilities, and comparative research could help educators and institutions make informed decisions about which tool aligns best with their instructional objectives. Such research would facilitate the selection of the most suitable tool for specific EFL contexts.

Expanding the research to encompass diverse EFL contexts represents another promising avenue. Investigating different countries, educational settings, and learner demographics can shed light on how the impact of automated tools varies across various contexts. This would lead to more context-specific recommendations that can be tailored to the unique needs of learners.

Moreover, future research should explore the potential of automated tools to address high order writing issues beyond surface-level errors. Investigating how these tools can assist with higher-order concerns such as content development, organization, and coherence would be invaluable for educators aiming to nurture more well-rounded writers.

Personalization of learning paths within automated correction tools is another area worth exploring. Customized feedback and exercises tailored to individual learner needs could significantly enhance writing proficiency and motivation, making technology-enhanced learning more adaptive and effective.

The role of teacher training and collaboration in maximizing the benefits of automated writing correction tools deserves further investigation. Understanding how instructors can effectively integrate these tools into their teaching practices and provide complementary support is critical for successful implementation.

Cultural factors influencing writing proficiency and the effectiveness of automated correction tools merit exploration. Different cultural norms and expectations may impact writing styles and errors in diverse EFL contexts, warranting a closer examination of these influences.

Hybrid instruction models that combine automated correction tools with traditional teaching methods could provide a balanced approach to writing instruction. Future research could focus on determining the optimal balance between automated and teacher-provided feedback to maximize learning outcomes.

Motivation interventions within automated correction tools represent an exciting area of research. Exploring how elements such as gamification, goal setting, or peer interaction features can enhance learners' motivation to write in EFL contexts would be beneficial for instructional design.

The impact of automated correction tools on teacher workload and time allocation is another essential area for future research. Understanding how these tools can streamline the feedback process, allowing instructors to allocate more time to other aspects of teaching, would provide valuable insights.

Lastly, researchers should also investigate the accessibility and inclusivity of automated correction tools. Ensuring that these tools are usable and beneficial for learners with diverse learning needs and abilities is paramount for equitable language education.

By pursuing research in these directions, scholars and educators can continue to advance our understanding of how technology-enhanced tools like "Write and Improve" can best serve the goals of EFL writing instruction. These inquiries will contribute to the ongoing refinement of pedagogical practices in EFL classrooms worldwide, ultimately benefiting both learners and instructors.

Limitations of the Study

While this study has provided valuable insights into the impact of "Write and Improve" on EFL writing proficiency and autonomy, it is important to acknowledge its limitations and constraints. These limitations highlight areas where the research may not have been exhaustive or where additional investigation is needed.

One of the primary limitations of this study is the relatively small sample size of participants. The study focused on a specific group of Algerian EFL learners, and while the findings are informative for this particular context, they may not be fully generalized to other EFL populations. Further research with larger and more diverse samples across various educational contexts is needed to enhance the generalization of the findings.

The study's duration was relatively short, encompassing twelve sessions. Writing proficiency and motivation can be influenced by various factors over more extended periods. A longitudinal study that examines the long-term effects of using "Write and Improve" on writing proficiency and motivation would provide a more comprehensive understanding of its impact.

The study focused on knowing in general the types of errors addressed by WIF, Future research should explore the tool's effectiveness on specific types of errors especially more complex writing issues related to content organization, coherence, and style.

The study did not extensively investigate individual differences among learners, such as their prior language proficiency, writing skills, or learning styles. These factors can influence how learners interact with automated correction tools and the extent to which they benefit from them. Future research could delve deeper into these individual differences to provide a more nuanced understanding.

The mere knowledge of being part of a research study can influence participants' behavior, leading to the so-called Hawthorne effect. In this study, participants knew they were using "Write and Improve" for research purposes, which might have influenced their engagement and motivation differently than if they were using it in a typical classroom setting. Investigating the tool's impact without participants' awareness of the research could yield different results.

The study assessed changes in motivation primarily through quantitative measures, such as self-report surveys. While these measures provide valuable data, they do not capture the full complexity of motivation. Future research could employ more diverse methods, including qualitative interviews or observations, to gain deeper insights into students' motivation.

The study acknowledged the influence of cultural and contextual factors on writing errors but did not extensively explore these factors. Further research could investigate how cultural and contextual elements impact the effectiveness of automated correction tools and writing instruction in EFL contexts.

The study focused on "Write and Improve" as a representative automated writing correction tool. Different tools may have varying features and capabilities. Future research

could compare multiple tools to identify their relative strengths and weaknesses in EFL writing instruction.

The study primarily gathered data from the perspective of learners. Incorporating the teacher's viewpoint and experiences with using automated correction tools could provide a more comprehensive understanding of their role in EFL writing instruction.

In conclusion, while this study contributes valuable insights into the impact of "Write and Improve" on EFL writing proficiency, autonomy, and motivation, it is essential to acknowledge these limitations. Addressing these constraints in future research will help refine our understanding of how automated correction tools can be effectively integrated into EFL classrooms and provide a more comprehensive picture of their benefits and challenges.

Conclusion

The aforementioned conclusions and recommendations has provided a comprehensive overview of the study's findings, offering valuable insights into the impact of "Write and Improve" on EFL writing proficiency, autonomy, and motivation. These findings have illuminated the potential of automated writing correction tools in enhancing language learning experiences while also acknowledging their limitations.

General Conclusion

The purpose of this thesis was to investigate the effectiveness of implementing automated error corrective feedback technique in the writing course of first year EFL students in minimizing students' writing errors and enhancing their writing proficiency and autonomy . The present research was conducted by a teacher research of written expression module for first year students for three years in the department of English of MCMU. This modest experience in teaching EFL writing in university enables the researcher to have information about EFL students' writing proficiency level, the type of writing errors that prevails most in their writings, their main writing difficulties they face, and many other EFL writing learning and teaching related realities.

As for the choice of technology integrated instruction as an alternative for the traditional teaching instructions usually used by EFL written expression teachers, it was based on the promising results of previous studies which investigated the use of this classroom instruction for developing students' skills and enhancing their levels in different areas. Moreover, the use of this classroom instruction in the EFL writing classroom was backed by many scholars and researchers (Rudner and Liang, 2002, Powers et al., 2001, Dikli, 2006, Rudner and Liang, 2002, LinHuang's , 2010) who have reported its fruitful outcomes and recommended its implementation in different EFL teaching contexts.

Furthermore, concerning the selection of ACF technique for responding to students' writing errors, it was based on two main reasons: First, among the available techniques for responding to students' writing errors, ACF is the most adequate to be implemented in a writing course because the process and strategies of ACF technique are in line with the principles of the new landscape of technology integration in education and also with learner-centered approaches instruction. Thus, it is not surprising that some scholars classify ACF technique as an autonomous writing activity. Secondly, ACF technique is widely

documented for its benefits in minimizing EFL students' writing errors and improving their writing proficiency.

Therefore, given these research motives that emerged from the extensive and critical reading of both theoretical and empirical previous studies on writing instruction and automated corrective feedback fields, the present research hypothesized that the implementation of ACF technique within a technology integration based instruction in the EFL writing course will minimize EFL students' writing errors and enhance their writing and autonomy.

Accordingly, in order to put this research work into its theoretical context and select appropriate data collection instruments for gathering data about the topic of the research, the relevant literature was reviewed. First of all, the nature of the writing skill in general and EFL writing in particular was inquired so as to understand the metacognitive processes that take place while writing and account for the requirements an academic piece of writing should meet. Furthermore, the challenges students face when they write in EFL were addressed and their potential sources were investigated. Moreover, this research shed light on the various approaches of teaching writing skill with a main focus on the process approach, being the writing approach adopted in this study. Furthermore, since one of the main research aims is to examine EFL students' autonomy in writing, a whole section was devoted to this learning aspect. The theoretical framework of learner autonomy in language learning is presented, with emphasis on autonomy approach in writing and its significance in enhancing learners' writing proficiency.

Additionally, the focus of the second intermediary chapter of this research was on feedback in language teaching and learning in which the researcher tackled the significance of feedback in EFL instructional context in general, and in EFL writing development in particular, mentioning the motivational aspect of feedback on learner autonomy.

Furthermore, in the last theoretical part of the thesis, the focus was on automated corrective feedback and its implementation within technology-integration based EFL writing instruction. In this chapter, the researcher tried to make clear how these automated correction systems identify learners' errors, the main characteristics of the feedback provided via ACF tools, and the strategies that can be used to implement these ACF tools in EFL writing instruction, in addition to learners' perceptions of ACF and how these perceptions affect the effectiveness of ACF. The second section gave thorough insights on the "Write & Improve" program providing a guide to operate with it appropriately and effectively.

Concerning the methodological part of the study (presented in chapter four), the research was designed with a triangulated mixed-method design to gather quantitative and qualitative data which enables the researcher to answer the research questions. Four main research instruments were used, namely, a students' pre-experimental questionnaire, a pre-test/post-test quasi experiment, a post-experiment interview and a classroom observation. First, the students' pre-experimental questionnaire was conducted so as to explore the teaching/learning context of EFL writing in the department and discover any possible lacunas from the perspectives of students. Second, since this study is quasi-experimental, a quasi-experimental non equivalent groups design was used in order to investigate whether or not the implementation of ACF within a technology-integration based instruction in the EFL writing course is effective in minimizing EFL students writing errors and enhancing their writing proficiency level. During the experiment, the classroom observation took place in order to gain more information about learners' engagement with ACF in their writing tasks. Finally, the researcher conducted post experiment semi-structured interviews with a sample from the students who have participated in the study. The aim of conducting these interviews was accounting for the students' perception and attitudes towards the implementation of PF

technique in the writing course as well as eliciting in depth insights on how ACF have helped them write more accurate paragraphs.

As for the treatment of the data collected through these three research methods, descriptive statistics were used to analyse the quantitative data elicited from the students' questionnaire, as for the qualitative data, their content was coded into manageable categories before it was analysed following content analysis procedures. Concerning the analysis of quantitative data gathered from the quasi-experiment pre and posttests, descriptive statistics were employed to describe the results of both the pre-test and posttest while inferential statistics (paired samples t-test) was used to compare between the means of the two tests and test the research hypotheses. As for the treatment of qualitative data yielded from the post-experiment semi-structured interviews, they were classified into measurable themes and then their content was analysed in word-based form. Accordingly, the methodological triangulation of quantitative and qualitative data gathered by the different instruments used in the present research enabled the researcher to investigate the effect of implementing ACF technique in the writing course on EFL students' writing proficiency.

As far as the research findings are concerned, the study revealed that the integration of "Write and Improve" significantly improved writing proficiency among Algerian EFL learners, showcasing its effectiveness in addressing common surface-level errors. It also shed light on the types of writing errors detected and corrected by the tool, emphasizing its ability to target grammatical and vocabulary-related issues. However, the study highlighted limitations in the tool's capacity to address complex errors related to logical coherence and content organization, underscoring the need for a balanced approach to feedback.

The research findings provided a glimpse into the accuracy and perceived utility of the tool's feedback, with learners generally finding it helpful in their writing improvement process.

Moreover, the study emphasized the importance of a balanced feedback approach, as learners expressed a preference for a combination of both automated and teacher-provided feedback.

Perhaps most significantly, the study explored the impact of "Write and Improve" on learner autonomy and motivation. While it promoted autonomy and self-directed learning for many learners, some individuals became overly reliant on automated corrections. Motivation to write in English varied among learners, with some reporting increased motivation due to gamified aspects and immediate feedback.

The pedagogical implications of the study's findings suggest that educators can harness the benefits of automated writing correction tools by integrating them into their classrooms. However, they must do so thoughtfully, recognizing the tools' boundaries and promoting a balanced approach to feedback. This approach can empower learners to take ownership of their writing while still benefiting from personalized teacher guidance.

Furthermore, the study offered recommendations for EFL educators, emphasizing practical steps to effectively incorporate tools like "Write and Improve" into their teaching practices. These recommendations provide guidance for educators seeking to optimize the benefits of technology-enhanced language learning.

Acknowledging its constraints, the study discussed its limitations, such as the specific context of Algerian EFL learners and the tool's limitations in addressing advanced writing issues. These limitations provide opportunities for future research to build upon the current findings.

Finally, potential future research directions were highlighted, offering insights into areas that warrant further exploration within the field of EFL writing instruction and technology integration. These directions aim to expand our understanding of how automated writing correction tools can best serve learners in diverse contexts and enhance language education.

In sum, this study has contributed significantly to the field of EFL education by providing empirical evidence of the impact of "Write and Improve." It has not only illuminated the potential benefits and challenges of automated writing correction tools but has also offered a roadmap for educators and researchers to continue refining their approaches to language instruction. By embracing the findings and recommendations presented in this study, EFL educators can foster more proficient, motivated, and autonomous writers in the ever-evolving landscape of language education.

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Appendix 01: Students' Questionnaire

Dear Students,

This questionnaire is a part of a doctoral research project which aims at investigating the impact of automated corrective feedback on EFL students writing proficiency and autonomy. We would be so grateful if you could answer the questions below as honestly and thoughtfully as possible. Your insights are invaluable in helping us understand the causal relationship between the automated error corrective feedback and EFL learners' writing and autonomy. Please take a few minutes to complete this questionnaire honestly and thoughtfully.

Section 1: Students Experience with Writing in English

1-How would you describe your overall experience with writing in English?

- a- Very Positive
- b- Positive
- c- Neutral
- d- Negative
- e- Very Negative

2-How do you find writing in English?

- a- Very interesting
- b- Interesting
- c- Less interesting

3-How do you perceive your writing skill?

- a- Proficient
- b- Intermediate
- c- beginner

Section 2: Students' writing difficulties and most frequent errors

4-How do you find EFL writing tasks?

- a- Difficult
- b- Medium
- c- Easy

5-What type of errors that frequently appear in your writings?

- a- Grammatical
- b- Vocabulary (word choice)
- c- Mechanical
- d- Cohesion and coherence
- e- Content
- f- organization
- g- Others :

6- What are the main factors contributing to these errors?

- a- Linguistic factors (problems related to language use)
- b- Psychological factors (lack of motivation, lack of confidence, anxiety, ...)
- c- Cognitive factors (misunderstanding the writing requirements)
- d- Teaching factors (teaching approaches, strategies and materials)
- e- Time factors (lack of time)

Section 3: Students' strategies to self-correct their errors.

7- Which of the following strategies you use to self- correct and minimize your writing errors?

- I think about the requirements of a writing tasks and then set a writing goal before I actually write (brainstorming and goal setting strategies)
- I plan before I write (planning strategies)

- I make drafts when doing writing tasks (drafting strategies)
- Even the teacher does not ask me to, I proofread and revise my writing drafts.

(Revising strategies)

- I do not use any of these strategies.
- Others:

.....

8-What are your own practices to improve your writing skill?

- I look for chances to practise writing outside the classroom.
- I look for ideas for writing outside the class.
- Even I am not under supervision, I would still urge myself to learn writing.
- I select examples of good writing to read.

(self-directness practices)

- I use reference tools like dictionaries and grammar books when I write.
- I use computer based tools (e-dictionaries, google translators, automatic correctors, paraphrasing tools) when I write. (ICTs integration practices)
- I do not use any of these practices.
- Others:

.....

Section 4: Students' Writing Autonomy

9-How motivated are you to write in English at the beginning of this academic year?

- a- Very motivated
- b- Somewhat motivated
- c- Not very motivated

d- Not motivated at all

10-How confident do you feel in your ability to write in English at the beginning of this academic year?

a- Very confident

b- Somewhat confident

c- Not very confident

d- Not confident at all

11- Which of the following characteristics of autonomous writer do you possess from the beginning of this academic year?

a- I have studied English writing by myself, and I have learnt a lot from this.

b- I believe that I can push myself to improve my English writing even if there is no supervision.

c- I have clear and concrete goals in writing.

d- I clearly know my strengths and weaknesses in the area of writing.

e- I clearly know my English writing level.

f- When I write in English, I always try new techniques and materials.

Section 5: Students' experiences and perceptions of teacher feedback

12-Does your teacher help you when you write?

a- Never

b- Some times

c- Always

13-On which area of writing does your teacher provide you with feedback?

a- Grammatical

- b- Vocabulary
- c- Mechanical
- d- Cohesion and coherence
- e- Content
- f- organization
- g- Others

14-How important is the feedback received from others (teachers /peers) for your writing process?

- a- Very important
- b- Somehow important
- c- Neutral
- d- Not very important
- e- Not important at all

• **Justify your answer (say why)?**

.....

.....

.....

15-Do you ask your writing teacher/peers for help and feedback?

- a- Yes
- b- No

16-If yes, to what degree are you agree /disagree with the following statements (your degree of dependence on your writing teacher/peers)?, By indicating your level of agreement with each statement?

Strongly agree Agree Disagree Strongly disagree

- a- I like teacher to tell me what to write about.
- b- The teacher should explain in detail the requirements of each writing task.
- c- When I write, the teacher should provide me with model essays as well as vocabulary and sentence **patterns** related to the topic.

17- If no, say why?

- a- I somehow feel shy and insecure when my teacher or peers recognize or notice I make errors in writing.
- b- I do not like other people to read my writing
- c- I do not like asking others questions related to writing

18- Which type of feedback you prefer your teacher provide you with?

- a- Direct feedback
- b- Indirect feedback

19 - Do you actually pay attention to the feedback you receive?

- a- Yes
- b- No

20- How do you perceive the feedback given by your teacher?

- a- Understandable (clear)
- b- Contextualized (Relevant)
- c- Specific
- d- Useful
- e- Non-judgemental (Motivating)
- f- Timely
- g- Infrequent
- h- Inconsistent

i- Others:.....

Section 6: Students' Experience and perceptions of Automated Corrective Feedback

21- Have you ever used any automated error corrective feedback tools for improving your English writing skills before participating in this study?

a- Yes

b- No

22- If yes, please briefly describe your experience with these tools, including any specific tools or platforms you have used and your general impressions.

.....
.....
.....

23- Please share your opinions on the use of automated error corrective feedback tools in the following areas by indicating your level of agreement with each statement:

Strongly Agree Agree Neutral Disagree Strongly Disagree

a- Automated feedback may help me improve my writing skills

b- Automated feedback may help me become more autonomous in my writing

c- Automated feedback may be as effective as teacher-written feedback.

24- Please feel free to share any additional comments, insights, or experiences related to automated error corrective feedback in your English writing assignments.

.....
.....
.....

We greatly appreciate your participation in this questionnaire. Your valuable input contributes to the ongoing research in EFL writing instruction. Thank you once again for your time and valuable insights.

Sincerely

SAHKI Toufaha

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Appendix 02: Pre-test Post-test

1- Pre-test: Write a Personal Anecdote (Adopted from “Write and improve” workbook)

Think of a short, interesting personal story or anecdote from your life. It could be a funny incident, a heartwarming moment, a lesson you learned, or a surprising turn of events. Write a narrative paragraph to share this anecdote with your readers.

In your narrative:

1. Begin by introducing the setting and context of the story.
2. Use storytelling techniques to build suspense or interest.
3. Clearly outline the sequence of events, including any challenges or conflicts.
4. Convey the emotions, thoughts, or reactions of the characters, including your own.
5. Conclude by reflecting on the significance or take away from the anecdote.

The goal is to engage your reader and make them feel a connection to your personal experience. Be sure to use narrative language and storytelling elements to bring the anecdote to life.

Write

Pre-test Task : Narrative Paragraph

About

Write a Personal Anecdote

Select a range between 20 and 600 words:

Between

About

80

and

100

words

Question

B *I* U ~~S~~  

Think of a short, interesting personal story or anecdote from your life. It could be a funny incident, a heartwarming moment, a lesson you learned, or a surprising turn of events. Write a narrative paragraph to share this anecdote with your readers.

In your narrative:

1. Begin by introducing the setting and context of the story.
1. Use storytelling techniques to build suspense or interest.
2. Clearly outline the sequence of events, including any challenges or conflicts.
3. Convey the emotions, thoughts, or reactions of the characters, including your own.

Appendix 03: Post-test

Post-test: Describe a Life-changing Decision (Adopted from “Write and improve” workbooks)

Think about a pivotal moment in your life when you had to make a significant decision that had a profound impact on your future. This could be a decision related to education, career, relationships, travel, or any other aspect of life. Write a descriptive narrative paragraph to recount this life-changing decision-making process.

In your narrative:

1. Begin by providing the context and background that led to the decision.
2. Describe the factors, thoughts, and emotions that influenced your decision-making.
3. Explain how you arrived at your final choice, including any struggles or uncertainties you faced.
4. Narrate the immediate aftermath of your decision and how it affected your life.
5. Reflect on the long-term consequences and changes that resulted from this decision.
6. Share any lessons or insights you gained from the experience.

The aim is to engage your reader in the journey of making a life-changing decision, allowing them to understand the complexity of the situation and the impact it had on your life. Use descriptive language and storytelling elements to make the narrative compelling and relatable.

Write

Post-test Task : Descriptive narrative paragraph

About

Describe a Life-changing Decision

Select a range between 20 and 600 words

Between

About



80

and

100

words

Question

B *I* U ~~S~~  

Think about a pivotal moment in your life when you had to make a significant decision that had a profound impact on your future. This could be a decision related to education, career, relationships, travel, or any other aspect of life. Write a descriptive narrative paragraph to recount this life-changing decision-making process.

In your narrative:

1. Begin by providing the context and background that led to the decision.
2. Describe the factors, thoughts, and emotions that influenced your decision-making.
1. Explain how you arrived at your final choice, including any struggles or uncertainties you faced.

Appendix 4: First Year (S1+S2) Written Expression and Comprehension Syllabus

Contents

— Révision programme CPND LLE 2020/2021 —

— Révision programme CPND LLE 2020/2021 —

Semestre 1										
Unités d'enseignement	Intitulé des matières	Crédits	Coefficients	Volume horaire hebdomadaire			VHS (15 semaines)	Autre*	Mode d'évaluation	
				Cours	TD	TP			CC*	Examen
U E Fondamentale Code : UEF 1.1	Compréhension et expression écrites 1 ^a	4	2		3h00		45h00	55h00	50%	50%

Semestre 2										
Unités d'enseignement	Intitulé des matières	Crédits	Coefficients	Volume horaire hebdomadaire			VHS (15 semaines)	Autre*	Mode d'évaluation	
				Cours	TD	TP			CC*	Examen
U E Fondamentale Code : UEF 1.2	Compréhension et expression écrites 2 ^a	4	2		3h00		45h00	55h00	50%	50%

L1 (S1+S2)

Semester: 01

Teaching Unit: Fundamental

Module: Comprehension and Written Expression

Credits: 04

Coefficient: 02

Course Objectives

- Approach comprehension and written expression in the language of study, so that the student will be able to produce a coherent text.
- Allow the student to develop his textual, meta-textual and linguistic knowledge by reading all types of texts to produce them subsequently.
- Install / develop reading and writing skills (and strategies).

- Know how to identify the literal and inferential meaning.

Prerequisite

-To learn all the skills necessary for written expression, a highly structured, explicit, systematic teaching approach is needed with many opportunities for students to practise and apply learned skills.

Subject Contents

- Parts of speech (introduction)
- From word to sentence
- Sentence problems
 - o Unparalleled Structures
 - o Wordiness
 - o Choppy Sentences
 - o Stringy Sentences
 - o Run-ons (Fused Sentences) and Comma Splices
 - o Sentence Fragments
 - o Faulty Coordination/Subordination
- From sentence to paragraph
- Types of Sentences
 - According to Function (Declarative, Interrogative, Exclamatory and Imperative)
 - According to Form (Simple, Complex, Compound, and Compound-Complex)

Assessment

50% - 50% (Written exams and continuous Assessment)

Sources and references

<http://writingguide.geneseo.edu/?pg=topics/formalinformal.html>

1- <http://grammar.ccc.commnet.edu/grammar/>

2- <http://www.powa.org/>

3- <http://owl.english.purdue.edu/owl/>

4- Malcolm Mann, Steve Taylore-Knowles Writing: Student's Book; Macmillan ELT 2003

5- Wendy Sahanaya, Jeremy Lindeck, Richard Stewart IELTS Preparation and Practice
Reading and Writing: Academic Module; Publisher: Oxford University Press 2004

Semester: 02

Teaching Unit: Fundamental

Module: Comprehension and written expression

Credits: 04

Coefficient: 02

Course Objectives

-Approach comprehension and written expression in the language of study, so that the student will be able to produce a coherent text.

- Install / develop reading and writing skills (and strategies).

Students will be able to start the process of writing based on planning and outlining, drafting, revising and editing and writing a final copy in a clearly structured, logical sequence.

Prerequisite

-Students must be taught to identify features and structures of texts when reading and work towards transferring their spoken language into written work.

Subject Contents

- Paragraph organization

o topic,

- o supportive
- o concluding sentences
- Mechanics of writing
 - o Capitalization
 - o punctuation,...etc)
- Types of paragraphs
 - o Descriptive
 - o Narrative
 - o Descriptive narration
 - o Expositive (examples developed by: division, definition, cause, effect , comparison and contrast
- Basic essay structure
 - o introduction
 - o body -development
 - o conclusion

Assessment

50% - 50% (Written exams and continuous Assessment)

Sources and references

1- <http://writingguide.geneseo.edu/?pg=topics/formalinformal.html>

2- <http://grammar.ccc.commnet.edu/grammar/>

3- <http://www.powa.org/>

4- <http://owl.english.purdue.edu/owl/>

6- Malcolm Mann, Steve Taylore-Knowles Writing: Student's Book; Macmillan ELT 2003

7- Wendy Sahanaya, Jeremy Lindeck, Richard Stewart IELTS Preparation and Practice
Reading and Writing: Academic Module; Publisher: Oxford University Press 2004

Appendix 05: Post-Experiment Student' Interview

Reviewing “Write and Improve”

This interview serves as data collection tool for a doctoral study which investigates the effectiveness of implementing automated error corrective feedback (ACF) in the teaching of writing at the university level. Hence, in order to better understand the usefulness of ACF in minimizing EFL students' writing errors, your perception of the use of “Write and Improve” program used in your writing course is of significant value for this research. You should know that the interview is recorded; however, the recording and findings will be used only for research purposes and the researcher assures anonymity of responses and findings.

Questions

1. Can you describe your overall experience using the "Write & Improve" feedback (**WIF**) tool for your writing assignments over the four-weeks intervention?
2. How did you find CWIF usefulness?
3. Did you observe any noticeable improvements in your writing skills as a result of using WIF
 - If yes, please provide specific writing areas improvements.
4. Were there particular areas of writing that you found WIF tool to be most effective in addressing?
 - What are these areas?
5. Were there particular areas of writing that are left untreated by WIF tool?
 - What are these areas?
6. How did you incorporate the feedback received from the tool into your writing revision process?

7. In your opinion, how did the feedback from the WIF tool differ from the feedback given by your teachers?

8. How did you balance the use of automated feedback with feedback provided by your teachers?

9. Did you appreciate knowing your CEFR level on every writing edited?

10. How did you find the codes and other feedback features in the interface?

11. According to your experience with WIF in your writing class, What are the difficult and/or challenging features of its use?

- Please, mention them!

12. What are your suggestions on the interface you see necessary to be developed in CWIF in order to help improve your writing skills:

- further pedagogical options
- Combining teacher feedback and CWIF
- technical improvements

13. Reflecting on your experience, how do you think the automated feedback tool contributed to your development as a more autonomous learner? i.e, after using WIF, do you notice any effect on your writing autonomy?

- If yes, please provide specific affected aspects of autonomy (self-confidence, motivation, self-directedness, self-correction strategies and teacher independence ?

Appendix 6: Students' Pre-test Marks

CG Students	Pretest Scores	EG Students	Pretest Scores
Student 1	8	Student 31	11
Student 2	7	Student 32	10
Student 3	10	Student 33	13
Student 4	12	Student 34	7
Student 5	6	Student 35	11
Students 6	8	Student 36	16
Students 7	5	Student 37	13
Student 8	8	Student 38	15
Student 9	11	Student 39	14
Student 10	14	Student 40	1

Student 11	13	Student 41	6
Student 12	15	Student 42	8
Student 13	8	Student 43	3
Student 14	9	Student 44	9
Student 15	10	Student 45	14
Student 16	12	Student 46	8
Student 17	12	Student 47	10
Student 18	7	Student 48	12
Student 19	6	Student 49	8
Student 20	6	Student 50	16
Student 21	5	Student 51	13
Student 22	3	Student 52	15
Student 23	13	Student 53	14
		Student	
Student 24	14	54	8
Student 25	15	Student 55	4
Student 26	16	Student 56	8
Student 27	8	Student 57	5
Student 28	9	Student 58	11
Student 29	10	Student 59	12
Student 30	12	Student 60	9

Appendix 7: Students' Pre-test/ post-test Levels

Student	Pre-test Level	Post-test Level
S31	A1	A1
S32	A1	B1
S33	B1	B2
S34	B2	B2
S35	A1	B1
S36	B1	B2
S37	A2	B1
S38	B1	B2
S39	B2	B2
S40	B1	B2
S41	B2	B2
S42	B2	C1
S43	A1	B1
S44	A2	B1
S45	C1	C2
S46	B1	B2
S47	A2	B1

S48	B2	B2
S49	B2	C1
S50	B1	B2
S51	B1	B1
S52	A2	B1
S53	A1	B1
S54	B2	B2
S55	C2	C2
S56	A1	B1
S57	C1	C1
S58	B1	B1
S59	B2	B2
S60	A2	B2