

EFFECT OF USING AN AUTOMATED CORRECTIVE FEEDBACK TOOL ON L2 NARRATIVE WRITING OF ESL LEARNERS

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ABSTRACT

Feedback literacy, defined as the ability to interpret, apply, and reflect on feedback effectively, is essential for the development of writing skills. However, in ESL contexts, learners often struggled to fully comprehend and integrate feedback, which might hinder their writing development. This study examined the impact of an automated corrective feedback tool, Grammarly, on the L2 narrative writing skills and feedback literacy of ESL undergraduate students. It aimed to assess Grammarly's effectiveness in improving grammatical accuracy, syntactic complexity, vocabulary usage, and writing mechanics, while also exploring students' perceptions of automated feedback and their ability to engage with it meaningfully. A mixed-methods approach was employed, involving twenty ESL learners from a university in Hyderabad, India. The study followed a pre-test, intervention, and post-test design, during which participants were trained in narrative writing using a process-based approach and introduced to Grammarly for feedback support. Data were collected through writing samples, questionnaires, and semi-structured interviews. Quantitative analysis revealed significant improvements in linguistic accuracy and overall writing quality. Thematic analysis showed that while students found Grammarly helpful, they faced challenges with certain feedback, especially stylistic suggestions. The study highlights the potential of automated tools in enhancing writing and feedback literacy, while underscoring the need for explicit instruction in feedback interpretation.

Keywords: Grammarly, narrative writing, feedback literacy, ESL learners, automated corrective feedback

1.0 INTRODUCTION

Writing proficiently in English is crucial for academic, professional, and personal success in today's interconnected world (Cumming, 1989). Silva & Matsuda (2001) emphasize the development of writing abilities among undergraduate students to meet the demands of diverse communication contexts. In addition to this, writing provokes thinking, makes students concentrate and manage ideas, and nurtures their summarizing, analyzing and criticizing abilities (Maghsoudi, 2013). Within this context, the integration of technology, particularly automated corrective feedback tools, has garnered attention for its potential to enhance language learning outcomes (Liu & Sadler, 2003). With the proliferation of digital resources, educators have sought to leverage technology to facilitate language acquisition and writing proficiency (Chapelle & Jamieson, 2008).

This study examines the impact of Grammarly, an AI-based writing tool, on the narrative writing skills and feedback literacy of undergraduate ESL learners. The research addresses a gap in the literature by exploring the effectiveness of automated corrective feedback tools in ESL writing instruction. By investigating the role of technology in language learning, the study aims to advance pedagogical practices and provide practical insights for educators and practitioners in ESL instruction (Li, 2010). Writing in a second language presents unique challenges for ESL learners, including maintaining narrative flow, incorporating descriptive details, and organizing events coherently (Hyland, 2003). Effective instruction in L2 narrative writing focuses on developing these skills through meaningful practice, personalized feedback, and reflective engagement, enabling students to express personal experiences and reflections authentically.

The study is situated at the intersection of language education and technology, with a specific focus on ESL writing instruction. The integration of technology into language learning has become increasingly common, offering new opportunities to enhance language proficiency and support the development of writing skills (Liu & Sadler, 2003).

The research is guided by the following objectives:

1. To evaluate the effectiveness of Grammarly in providing corrective feedback on grammar, syntax, vocabulary, and writing mechanics in L2 narrative writing.
2. To examine the extent to which Grammarly contributes to the development of feedback literacy among ESL learners, including their ability to interpret and apply feedback to improve their writing.
3. To explore students' perceptions and experiences of using Grammarly as a writing enhancement tool, including their attitudes toward automated feedback and its impact on their writing processes.

2.0 REVIEW OF DOMAIN-SPECIFIC CONSTRUCTS

In this section, we review key domain-specific constructs relevant to the topics of automated corrective feedback, L2 writing skills, and feedback literacy.

Automated Corrective Feedback

Automated corrective feedback refers to the use of digital tools, such as Grammarly, to provide immediate feedback on language errors and writing mechanics. These tools employ natural language processing algorithms to identify and suggest corrections for grammatical, syntactical, and lexical errors in written texts.

Narrative Writing Skills

L2 narrative writing skills involve the ability to craft compelling personal recounts, encompassing grammatical accuracy, syntactical complexity, vocabulary use, and coherent narrative organization.

Feedback Literacy

Feedback literacy refers to learners' ability to understand, interpret, and act on feedback received on their writing. It involves the skills and strategies needed to engage critically with feedback, identify areas for improvement, and make appropriate revisions to written texts (Carless & Boud, 2018). In the context of L2 writing, feedback literacy plays a crucial role in facilitating language development and improving writing proficiency. Developing feedback literacy requires not only recognizing and addressing errors but also understanding the principles of effective writing and applying feedback in subsequent tasks (Hyland & Hyland, 2006).

3.0 REVIEW OF PREVIOUS STUDIES

This section examines prior research on L2 narrative writing skills, the effects of feedback on L2 writing, and feedback literacy.

Research on L2 narrative writing skills has explored various aspects of narrative production, including linguistic features, narrative structure, genre conventions, and discourse coherence. Studies have investigated the development of narrative competence in second language learners across different proficiency levels and age groups, examining factors such as language input, instructional interventions, and individual differences in writing ability (Gerrig et al., 1995; Schiffrin, 1981). Additionally, research in the domain has examined the role of cultural and contextual factors in shaping narrative expression and storytelling conventions among learners from diverse backgrounds (Gee, 1985; Pavlenko & Lantolf, 1995).

A significant body of research has investigated the effects of feedback on L2 writing development, including both teacher-provided feedback and automated corrective feedback from digital tools. Studies have explored the impact of different types of feedback (e.g., corrective, elaborative, directive) on learners' writing accuracy, fluency, and complexity (Ferris, 2004; Hyland & Hyland, 2006). Researchers have also examined learners' perceptions and attitudes toward feedback, as well as factors influencing their uptake and implementation of feedback in writing revisions (Carless & Boud, 2018; Ellis, 2008).

3.1 Importance of Feedback Literacy

Feedback literacy refers to students' ability to interpret, understand, and apply feedback to enhance their learning and performance (Carless & Boud, 2018). In language learning, feedback literacy is crucial for developing writing skills as it enables students to recognize and address areas to improve one's writing. Feedback literacy, thus, plays a vital role in language learning by providing students with valuable insights into their strengths and weaknesses in writing (Carless & Boud, 2018). By engaging with feedback effectively, students can identify specific areas where they need to focus their efforts to improve their writing skills. This process of self-assessment and reflection is essential for fostering continuous development of writing proficiency. Moreover, feedback literacy empowers students to take ownership of their learning by actively seeking and utilizing feedback to enhance their writing skills (Carless & Boud, 2018). Rather than passively receiving feedback, feedback-literate students are proactive in soliciting feedback from peers, instructors, and other sources to support their learning goals. This proactive approach to feedback facilitates deeper engagement with writing tasks and promotes metacognitive awareness of the writing process.

Furthermore, feedback literacy cultivates students' ability to discern between different types of feedback and determine which feedback is most relevant and useful for their learning needs (Carless & Boud, 2018). By developing critical thinking skills, students can evaluate feedback effectively, distinguishing between constructive feedback that offers actionable suggestions for improvement and evaluative feedback that assesses the quality of their writing. This discernment enables students to make informed decisions about how to revise and refine their writing effectively.

Thus, feedback literacy is essential for promoting student agency, self-regulation, and reflective practice in language learning (Carless & Boud, 2018). By equipping students with the skills and strategies to engage with feedback meaningfully, educators can empower them to become more confident, proficient, and independent writers. Further, recent studies have focused on feedback literacy and its role in facilitating effective feedback engagement and writing improvement among language learners. Research has explored the development of feedback literacy skills through explicit instruction, self-regulated learning strategies, and reflective practice (Carless & Boud, 2018). Additionally, studies have investigated the relationship between feedback literacy and writing performance, highlighting the importance of fostering learners' ability to interpret and apply feedback in writing tasks (Hyland & Hyland, 2006; Lee, 2012).

3.2 Automated Corrective Feedback in ESL Writing

Effective writing skills are not only essential for academic success but also play a crucial role in the professional and social lives of ESL students (Hyland, 2003). However, the journey to mastery of English grammar, syntax, vocabulary, and writing mechanics can be particularly arduous for learners whose first language is not English. This challenge is compounded by the complexity of the English language and the diverse linguistic backgrounds of ESL students (Carless & Boud, 2018). In this context, automated corrective feedback tools emerge as promising allies in the quest to enhance ESL writing proficiency.

Automated corrective feedback tools offer a dynamic solution by providing instantaneous, personalized feedback on various aspects of writing (McNamara, 2010). These tools employ advanced algorithms to analyze written texts and identify errors in grammar, punctuation, spelling, and style. By offering specific suggestions for improvement, automated corrective feedback tools empower ESL students to identify and rectify errors in their compositions, thereby fostering a sense of autonomy and self-efficacy in their writing endeavors (Fowler, 2007; Dikli & Bleyle, 2014).

Furthermore, research indicates that the use of automated corrective feedback tools can mitigate the anxiety and frustration often associated with language learning by providing learners with immediate guidance and support (Carless & Boud, 2018). This real-time feedback not only helps students address immediate concerns but also facilitates ongoing learning and skill development (Qassemzadeh & Soleimani, 2016). As such, automated corrective feedback tools are recognized for their potential to accelerate the language learning process and bridge the gap between learners' current proficiency levels and their desired goals (Li et al., 2010).

3.3 Use of Grammarly in Developing Writing Skills: Report of a few Studies

Numerous published studies have explored the effectiveness of Grammarly in enhancing writing skills among ESL students. Carlberger et al. (2020) conducted a study and reported that ESL learners who employed a grammar checker tool similar to Grammarly were able to identify and rectify a higher proportion of grammatical errors compared to those who did not use an AI tool. Similarly, Li, Chen, and Duanmu (2009) investigated the impact of automated writing assistance tools on the academic performance of international students. Their findings suggested a positive correlation between the use of these tools and developments in writing accuracy and language proficiency. Similarly, O'Neill and Russell (2019) conducted a study to examine the perceptions of academic learning advisors regarding the use of Grammarly. They found that while some advisors viewed Grammarly as a helpful tool for identifying errors, others expressed concerns about its potential to hinder students' development of independent writing skills. Additionally, Qassemzadeh and Soleimani (2016) investigated the impact of Grammarly on the writing accuracy of intermediate EFL learners. Their study reported significant improvements in writing accuracy among students who used Grammarly compared to those who did not. These findings collectively suggest that Grammarly holds promise as a valuable tool for enhancing writing skills among ESL students. Despite these varying perspectives, the overall consensus pointed towards Grammarly's potential to improve writing quality and accuracy among ESL learners.

With this background, the study aimed at investigating the following research questions:

1. How does the use of Grammarly impact the grammatical accuracy, syntactic complexity, vocabulary usage, and writing mechanics in the narrative compositions of ESL undergraduate students?
2. To what extent does the integration of Grammarly contribute to the development of feedback literacy among ESL learners, including their ability to interpret, apply, and reflect on feedback provided by the tool?
3. What are the perceptions, experiences, and attitudes of ESL undergraduate students towards the use of Grammarly as an automated corrective feedback tool in narrative writing instruction?

4.0 RESEARCH METHODOLOGY

To seek answers to the above research questions, the study was conducted with twenty ESL first year undergraduate students, from The English and Foreign Languages University, Hyderabad, South India. The courses that the students are offered in their programme of study are related to their majoring Asian language. They are only offered one English course, which is Communicative English, where the language of instruction is in English. Proficiency in writing skills of these participants ranged from intermediate to upper intermediate. Only those participants, who were willing to participate in the study, were included in the study.

The study adopted a mixed-method approach. Through questionnaires and pre- and post-writing tests quantitative data was collected from the participants. Interviews were conducted for the qualitative data. With a pre-test, treatment, and post-test design, the participants' progress was tracked. Following evaluation of the pre-test, learners were taken into the treatment phase, where two weeks of intervention took place. During this period, the participants were trained in narrative writing through the process-based approach to writing

and also trained in using Grammarly. Each treatment session lasted for about 90 minutes and was three times a week. A post-test was conducted after the end of the last session of the treatment phase, which lasted for an hour. It was followed up by a semi-structured interview.

4.1 Tools

The primary tool utilized in this study is Grammarly, an AI-powered writing assistant widely used for grammar checking, punctuation correction, vocabulary enhancement, and plagiarism detection. Additionally, the study incorporated a range of materials to facilitate narrative writing instruction and data collection. These materials include:

- **Writing prompts:** A series of personal recount writing prompts were designed to motivate the samples to reflect on their own experiences and/or memories, encouraging them to share personal narratives. By focusing on personal recount writing, students were able to draw from their own lived experiences and emotions, facilitating authentic and engaging narrative expression.
- **Pre-test and post-test prompts:** Specific writing prompts were administered as pre-tests and post-tests to assess students' narrative writing skills before and after the intervention. The prompts were designed to evaluate students' proficiency in narrative composition, including narrative structure, coherence, cohesion, vocabulary use, and grammatical accuracy.
- **Rubric for Assessing Narrative Writing:** To evaluate the narrative writing produced by participants in this study, a comprehensive rubric (Singh, 2024) was adapted. This rubric consists of three levels, each with specific criteria and scoring guidelines. The rubric was designed to assess various aspects of narrative writing, including genre-specific elements, grammatical features, and graphic presentation. The scoring ranges from 0 to 3 for each criterion, reflecting the quality and proficiency of the narrative produced.
- **Questionnaires:** Questionnaires were administered to collect data about students' perceptions and experiences of using Grammarly as a writing enhancement tool.
- **Lesson Plans:** The lesson plans were tailored to the needs and proficiency levels of ESL undergraduate students who participated in the study. Each lesson plan followed a consistent format and incorporated specific objectives related to narrative writing and Grammarly usage.
- **Interviews:** Semi-structured allowed for in-depth exploration of students' attitudes, beliefs, and challenges related to the use of Grammarly, providing valuable insights into the nuances of their writing experiences. Interview was a crucial tool not only for the triangulation of the data, but also for understanding if the participants actually had any improvements in their feedback literacy skills.
- **Writing samples:** Participants' writing samples, both pre- and post-intervention, were collected and analyzed to assess changes in writing proficiency and feedback literacy over the course of the study. The writing samples served as the primary data source for evaluating the effectiveness of Grammarly in improving students' narrative writing skills.

4.2 Procedure

Prior to the intervention, participants were asked to complete a narrative writing task based on pre-test prompt. The participants were asked to bring their own laptops and do the task in the Notepad application. The prompt administered for the pre-test was as follows: 'Recount a specific moment when you were inspired by an incident or someone. Narrate how it motivated you to take action or pursue a goal'. The sample had five minutes to read the writing prompt and were provided an hour to write. These writings samples served as baseline measures of narrative writing proficiency.

During the intervention phase, participants received inputs in narrative writing techniques using a process-based approach. Additionally, they were instructed on how to use Grammarly effectively as an automated corrective feedback tool. Learners were first guided through brainstorming activities, where they generated ideas and vocabulary related to a central theme. This was followed by the writing of a first draft based on a narrative prompt. In the subsequent session, students worked in pairs to exchange drafts and revise their writing based on structured peer feedback focused on content, organization, language use, and grammar. Finally, they produced revised drafts, using Grammarly-generated feedback to arrive at a final version of their narrative writing.

Following the intervention, participants were asked to produce a piece of narrative writing. The prompt used for the post-test was: 'Life is full of choices. Share a story about a significant decision you made that changed the course of your life (big or small). Narrate the decision-making process, the potential outcomes you considered, and the impact it ultimately had on your journey'.

Performance of the participants in the pre- and post-tests was compared to identify whether the use of Grammarly impacted the grammatical accuracy, syntactic complexity, vocabulary usage, and writing mechanics in the narrative compositions. Semi-structured interviews were then conducted with the participants to understand their experiences of practicing the process approach to writing and also the use of Grammarly. To triangulate the data, a questionnaire was also administered to the samples.

5.0 FINDINGS AND DISCUSSION

The narrative writing samples collected during the pre-test and post-test phases were analyzed quantitatively to assess improvements in writing proficiency. Scores were assigned based on specific criteria, including genre-specific elements, grammatical accuracy, vocabulary usage, and graphic presentation. This comparison revealed measurable gains in participants' narrative writing performance following the intervention.

To complement the quantitative findings, qualitative data from semi-structured interviews were analyzed using thematic analysis. Recurring themes included students' perceptions of Grammarly's feedback, their ability to interpret and act on the suggestions provided, and observed changes in their writing practices. These themes offered insight into learners' evolving feedback literacy.

Additionally, responses from the post-intervention questionnaire were triangulated with both the writing samples and interview data. This integration provided a more holistic understanding of Grammarly's role in enhancing not only the surface-level accuracy of writing but also learners' engagement with feedback. Together, the findings suggest that while Grammarly supported improvements in narrative writing, it was most effective when accompanied by explicit instruction on interpreting and applying feedback critically.

5.1 Analysis of the pre- and post-test data

The scores of participants in the pre- and post-test were compared.

Table 1: Marksheet of the Pre-Test

Participants	Purpose	Orientation	Sequence of Events	Vocabulary	Sentence Variety	Noun Phrases	Verb Phrases	Spelling	Capitalization	Full stops	Commas	Total
S1	2	1	1	2	2	2	2	2	2	3	2	21
S2	2	2	1	2	2	1	1	2	2	3	1	19
S3	2	1	1	3	2	2	2	3	3	2	2	23
S4	2	1	2	2	2	2	2	3	2	3	3	24
S5	1	2	1	2	3	2	2	2	3	2	2	22
S6	1	2	1	2	2	2	2	2	3	2	2	21
S7	2	1	2	2	2	3	2	2	2	3	2	23
S8	2	1	2	2	2	2	3	2	3	3	3	25
S9	2	2	1	2	2	3	2	2	2	2	2	22
S10	2	2	2	3	2	3	3	3	3	3	3	29
S11	2	1	2	2	3	3	2	3	3	2	2	25
S12	2	2	1	2	3	2	2	2	3	2	1	22

Table 2: Marksheet of the Post-Test

Participants	Purpose	Orientation	Sequence of Events	Vocabulary	Sentence Variety	Noun Phrases	Verb Phrases	Spelling	Capitalization	Full stops	Commas	Total
S1	2	2	2	2	2	3	3	3	3	3	3	28
S2	3	2	1	2	2	2	3	3	3	3	3	27
S3	2	2	2	3	2	2	2	3	3	3	3	27
S4	2	2	2	2	2	2	2	3	3	3	3	26
S5	2	2	1	2	2	2	2	3	3	3	3	25
S6	3	2	2	3	2	2	3	3	3	3	3	29
S7	2	1	2	2	2	3	2	3	3	3	3	26
S8	2	2	2	2	2	2	3	3	3	3	3	27

S9	2	2	1	2	2	3	2	3	3	3	3	26
S10	3	2	2	3	2	3	3	3	3	3	3	30
S11	2	3	2	2	3	3	3	3	3	3	3	30
S12	2	2	2	2	2	2	2	3	3	3	3	26

For a better analysis descriptive statistic was performed on the pre- and post-test results. The results of the tests are given below:

Table 3: Scores from the Pre-Test

Pre-Test												
	<i>Pur ose</i>	<i>Orient ation</i>	<i>Sequ ence of Event s</i>	<i>Vocab ulary</i>	<i>Sent ence Varie ty</i>	<i>Nou n Phr ases</i>	<i>Verb Phr ases</i>	<i>Spel ling</i>	<i>Capitali sation</i>	<i>Ful l- sto ps</i>	<i>Com mas</i>	<i>To tal</i>
Mean	1.8	1.5	1.4	2.2	2.3	2.3	2.1	2.3	2.6	2. 5	2.1	23 .0
Stand ard Error	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0. 2	0.2	0. 7
Medi an	2	1.5	1	2	2	2	2	2	3	2. 5	2	22 .5
Mode	2	1	1	2	2	2	2	2	3	3	2	22
Stand ard Devia tion	0.4	0.5	0.5	0.4	0.5	0.6	0.5	0.5	0.5	0. 5	0.7	2. 6
Rang e	1	1	1	1	1	2	2	1	1	1	2	10
Mini mum	1	1	1	2	2	1	1	2	2	2	1	19
Maxi mum	2	2	2	3	3	3	3	3	3	3	3	29
Sum	22	18	17	26	27	27	25	28	31	30	25	27 6
Coun t	12	12	12	12	12	12	12	12	12	12	12	12

Table 4: Scores from the Post-Test

Post-test												
	<i>Pur ose</i>	<i>Orient ation</i>	<i>Sequ ence of Event s</i>	<i>Vocab ulary</i>	<i>Sent ence Varie ty</i>	<i>Nou n Phr ases</i>	<i>Verb Phr ases</i>	<i>Spel ling</i>	<i>Capitali sation</i>	<i>Ful l- sto ps</i>	<i>Com mas</i>	<i>To tal</i>

Mean	2.3	2.0	1.8	2.3	2.1	2.4	2.5	3.0	3.0	3.0	3.0	27.3
Standard Error	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.5
Median	2	2	2	2	2	2	2.5	3	3	3	3	27
Mode	2	2	2	2	2	2	3	3	3	3	3	26
Standard Deviation	0.5	0.4	0.5	0.5	0.3	0.5	0.5	0.0	0.0	0.0	0.0	1.7
Range	1	2	1	1	1	1	1	0	0	0	0	5
Minimum	2	1	1	2	2	2	2	3	3	3	3	25
Maximum	3	3	2	3	3	3	3	3	3	3	3	30
Sum	27	24	21	27	25	29	30	36	36	36	36	327
Count	12	12	12	12	12	12	12	12	12	12	12	12

A detailed examination of the scores in Tables 3 and 4 reveals several meaningful improvements across key aspects of narrative writing. The total mean score increased from 23.0 in the pre-test to 27.3 in the post-test, reflecting a substantial enhancement in overall writing performance.

The most notable improvement is seen in mechanics, specifically, spelling, capitalisation, full stops, and commas. Each of these categories reached a perfect mean score of 3.0 in the post-test, compared to means ranging from 2.3 to 2.6 in the pre-test. This indicates that students greatly improved their grammatical accuracy and attention to conventions. Syntactic features such as sentence variety, noun phrases, and verb phrases also showed positive trends. The mean score for noun phrases rose from 2.3 to 2.4, and verb phrases from 2.1 to 2.5. Although sentence variety saw a minor dip from 2.3 to 2.1, the increased consistency (lower standard deviation) suggests more uniform application of syntax across participants. Scores for genre-specific elements also improved. "Purpose" rose from a mean of 1.8 to 2.3, and "Orientation" from 1.5 to 2.0, indicating better alignment with narrative writing conventions. "Sequence of Events" increased modestly from 1.4 to 1.8, showing some development in organizing plot structure. Vocabulary scores remained stable at 2.2 in the pre-test and 2.3 in the post-test, suggesting slight improvement. While this is a smaller gain than in other areas, it still aligns with the overall positive trend.

The range decreased from 10 in the pre-test to 5 in the post-test, and the standard deviation dropped from 2.6 to 1.7, indicating a more consistent performance among participants after the intervention. A t-test performed on the total scores yielded a p-value of approximately

0.000059, far below the significance threshold of 0.05. This confirms that the observed improvements are statistically significant and unlikely to be due to random variation.

In sum, the findings indicate that the use of Grammarly significantly enhanced grammatical accuracy, syntactic complexity, vocabulary usage, and writing mechanics in the narrative compositions of ESL undergraduate students.

5.2 Analysis of the semi-structured interview

The analysis of semi-structured interviews commenced with the transcription and organization of responses for systematic examination. Audio recordings were transcribed in a Word document. Each interview transcript was meticulously reviewed, and relevant segments were identified to facilitate subsequent coding and categorization of the data. Thematic coding was employed to uncover key themes pertinent to feedback literacy embedded within participants' narratives. From this analysis, several recurrent themes emerged, including perceptions of the feedback provided by Grammarly, challenges associated with its interpretation, and strategies for effective application of the feedback provided by the AI tool. Building upon the thematic analysis, distinct categories were established to encapsulate different dimensions of feedback literacy exhibited by participants:

- Interpretation: Participants' comprehension and interpretation of Grammarly feedback.
- Application: How the participants have integrated suggestions provided by the AI tool, Grammarly, into their writing processes.
- Reflection: Insights into the impact of Grammarly on participants' writing skills and reflective practices.

These categories were instrumental in illuminating the multifaceted nature of participants' engagement with Grammarly's feedback and its implications for their development as writers within the ESL context.

5.2.1 Participants' Perceptions of Automated Feedback

A detailed examination of each category unveiled common patterns and nuanced variations across participants' responses. Through this analysis, notable quotes and excerpts were identified, encapsulating diverse perspectives on the impact of feedback by Grammarly, shedding light on the feedback literacy of the participants. The detailed examination of each category in the analysis provided positive insights into participants' responses and their evolving feedback literacy development facilitated by Grammarly. By closely scrutinizing participants' narratives, common patterns and nuanced variations emerged, enriching our understanding of their experiences.

5.2.1.1 Interpretation of Grammarly's Feedback

Participants exhibited varying levels of confidence in understanding suggestions provided by the AI tool, Grammarly. Some participants found the feedback clear and helpful, particularly in identifying recurring grammatical errors. For example, one participant remarked, "Grammarly helped me identify grammatical mistakes I wasn't aware of before." However, others struggled with more complex or stylistic suggestions, indicating a need for tailored

support in feedback interpretation. One participant explained, “Sometimes I didn’t understand why Grammarly suggested a change in word choice, it simply didn’t seem wrong to me.”

5.2.1.2 Integration of Suggestions by Grammarly into Writing

Many participants actively incorporated Grammarly feedback into their writing, leading to noticeable improvements in their use of grammatical structures and mechanics of writing. One participant shared, “I started using Grammarly’s suggestions in my writing process, which helped me write better.” However, some participants were selective in applying feedback, particularly when they felt their word choices were more appropriate than the tool’s suggestions. One participant stated “I don’t always follow the suggestions. If I feel it changes my tone or the way I want my story to sound, I leave it as it is.” This selective application highlighted the iterative nature of feedback utilization and the importance of personalized approaches.

5.2.1.3 Reflection on Writing and Feedback

Participants engaged in reflective practices, attributing improvements in their writing to Grammarly’s feedback. They expressed a heightened awareness of their writing strengths and weaknesses, emphasizing the tool’s role in fostering self-reflection. For instance, one participant noted, “Grammarly encouraged me to reflect more on my writing, helping me understand grammatical rules better.” This reflective engagement indicated a shift toward autonomous feedback utilization and underscored the transformative impact of the use of Grammarly on their writing processes.

In sum, the analysis of participants’ responses offered rich insights into their interpretation, application, and reflection on feedback provided by Grammarly. Notable quotes and excerpts from interviews illustrated the dynamic interplay between participants’ experiences and their evolving feedback literacy, highlighting the nuanced pathways through which Grammarly contributes to feedback literacy development among these learners. Participants’ experiences highlighted varied approaches to interpreting and applying Grammarly’s feedback, with some demonstrating increased confidence in feedback utilization while others articulating challenges encountered. These insights provided a comprehensive understanding of the dynamic feedback literacy landscape among ESL learners engaging with Grammarly.

5.2.2 Interpretation and Discussion

The thematic analysis revealed significant improvements in feedback literacy among participants. The findings from this study indicate significant development in participants’ feedback literacy following their engagement with Grammarly. These developments were evident in participants’ enhanced ability to interpret, apply, and reflect on feedback, and they are consistent with existing research on automated corrective feedback and L2 writing development.

The improvements in grammatical accuracy, mechanics, and syntactical control observed in the post-test scores align with studies such as Carlberger et al. (2020) and Qassemzadeh and Soleimani (2016), which reported that students using automated feedback tools like Grammarly demonstrated improved accuracy in their writing. Participants’ selective application of

Grammarly's suggestions, particularly concerning word choice or tone, reflects the development of critical engagement with feedback, one of the central elements of feedback literacy as defined by Carless and Boud (2018). Rather than passively accepting all feedback, participants demonstrated the ability to evaluate whether suggestions aligned with their communicative intentions, which illustrates agency and discernment in feedback use.

This nuanced engagement further resonates with Hyland and Hyland's (2006) assertion that effective feedback is not only about correction but about fostering deeper reflection and understanding of writing conventions. Participants' reflections that Grammarly made them more aware of their grammatical strengths and weaknesses support the idea that feedback tools can promote metacognitive awareness and self-regulated learning, which are critical components of developing feedback literacy (Carless & Boud, 2018).

Moreover, the ability of Grammarly to provide immediate, individualized feedback supported learners' self-efficacy and motivation; factors that Qassemzadeh and Soleimani (2016) noted can significantly reduce writing anxiety and enhance learners' confidence. Participants in this study reported feeling more independent and empowered to revise their work autonomously, a shift consistent with Fowler's (2007) view that such tools promote learner autonomy.

While the majority of feedback was successfully interpreted and applied, some participants experienced difficulty with more abstract or stylistic suggestions. These findings point to the limitations of automated tools and supports calls by scholars such as O'Neill and Russell (2019) for complementary pedagogical guidance to help students critically interpret feedback beyond the surface level. Their study cautioned that without such scaffolding, learners might either over-rely on the tool or disregard valuable feedback due to confusion or lack of understanding. In conclusion, the discussions surrounding ESL students' perceptions and experiences with the use of Grammarly highlight the importance of carefully thought-out integration and effective utilization of automated corrective feedback tools in ESL writing instruction. By leveraging Grammarly strategically, educators can nurture students' writing skills and feedback literacy, ultimately fostering a more engaging and productive learning environment for ESL learners.

6.0 CONCLUSION

To summarize, the study found that automated corrective feedback significantly enhanced grammatical accuracy, syntactic complexity, and lexical diversity among ESL learners. Participants developed greater confidence in interpreting, applying, and reflecting on feedback, supporting existing research on the benefits of automated corrective feedback. These findings highlight the value of integrating tools like Grammarly into ESL writing instruction alongside explicit guidance in feedback literacy to support deeper learning and writing development. Additionally, blended feedback approaches, combining automated and teacher-guided feedback, may be more effective in addressing both surface-level errors and deeper structural aspects of writing.

7.0 FUTURE RESEARCH DIRECTIONS

Further research should explore how automated feedback can be better integrated with teacher-led instruction to support holistic writing development. Additionally, investigating how learners of different proficiency levels interact with automated feedback could provide deeper

insights into personalized feedback strategies. Given the small sample size in the current study, future studies should consider larger and more diverse participant groups across varying proficiency levels, and examine the effects of automated feedback across different types and genres of writing to enhance generalizability and depth of understanding.

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